

TOWN OF TELLURIDE

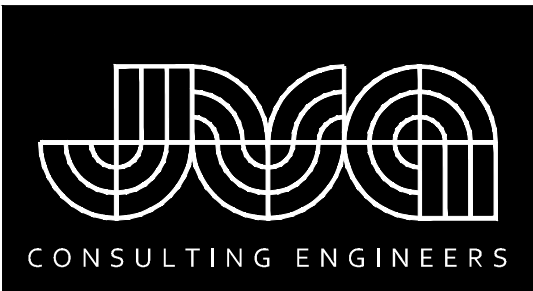
WASTEWATER TREATMENT FACILITY

2015 RAW LIFT STATION IMPROVEMENT PROJECT

BID SET

CONTACTS

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ELECTRICAL ENGINEER:	BROWNS HILL ENGINEERING AND CONTROLS, LLC. 8119 SHAFFER PARKWAY, UNIT C LITTLETON, CO 80127 TED WILLE, P.E.	(720) 344-7771
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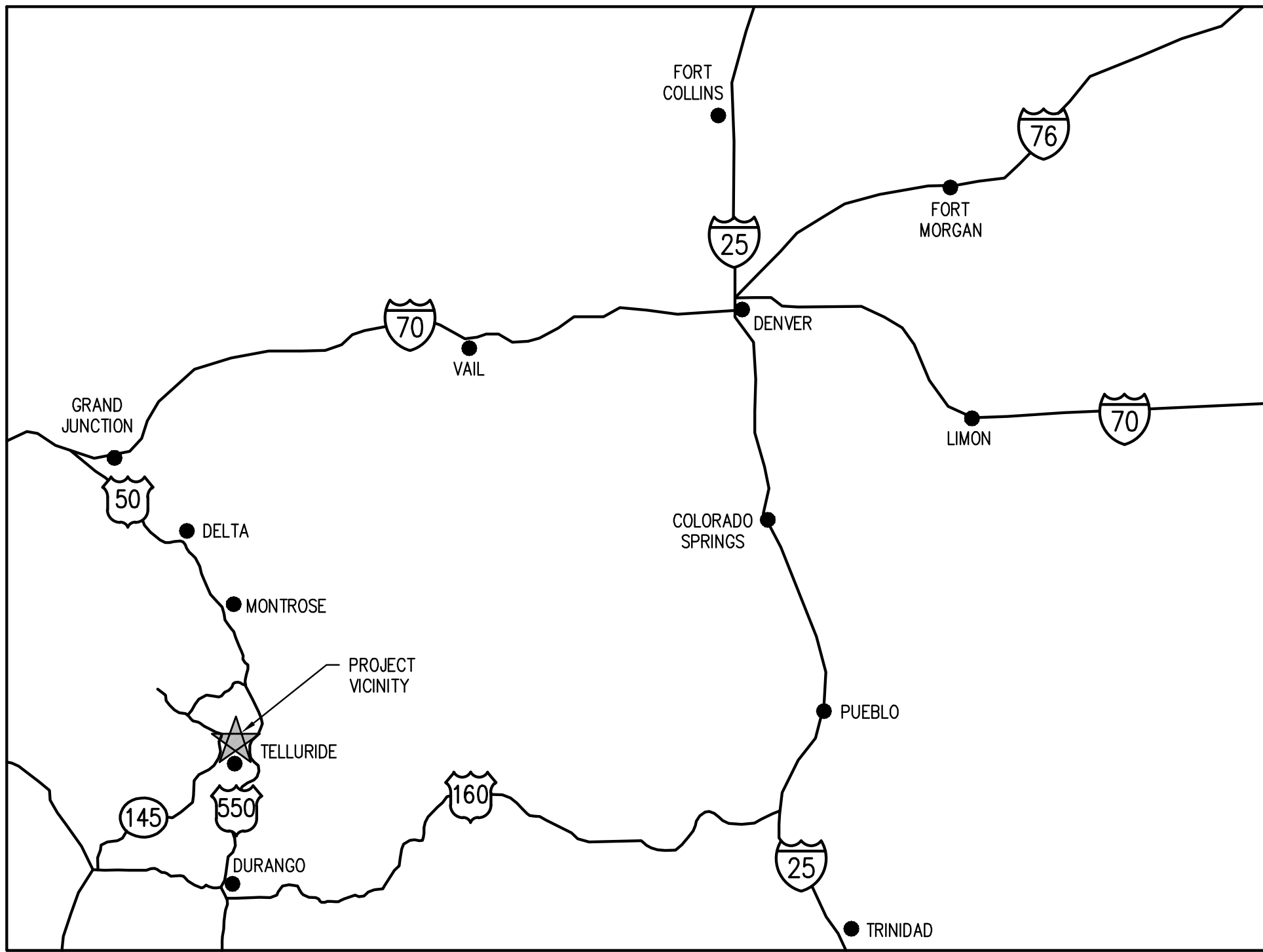
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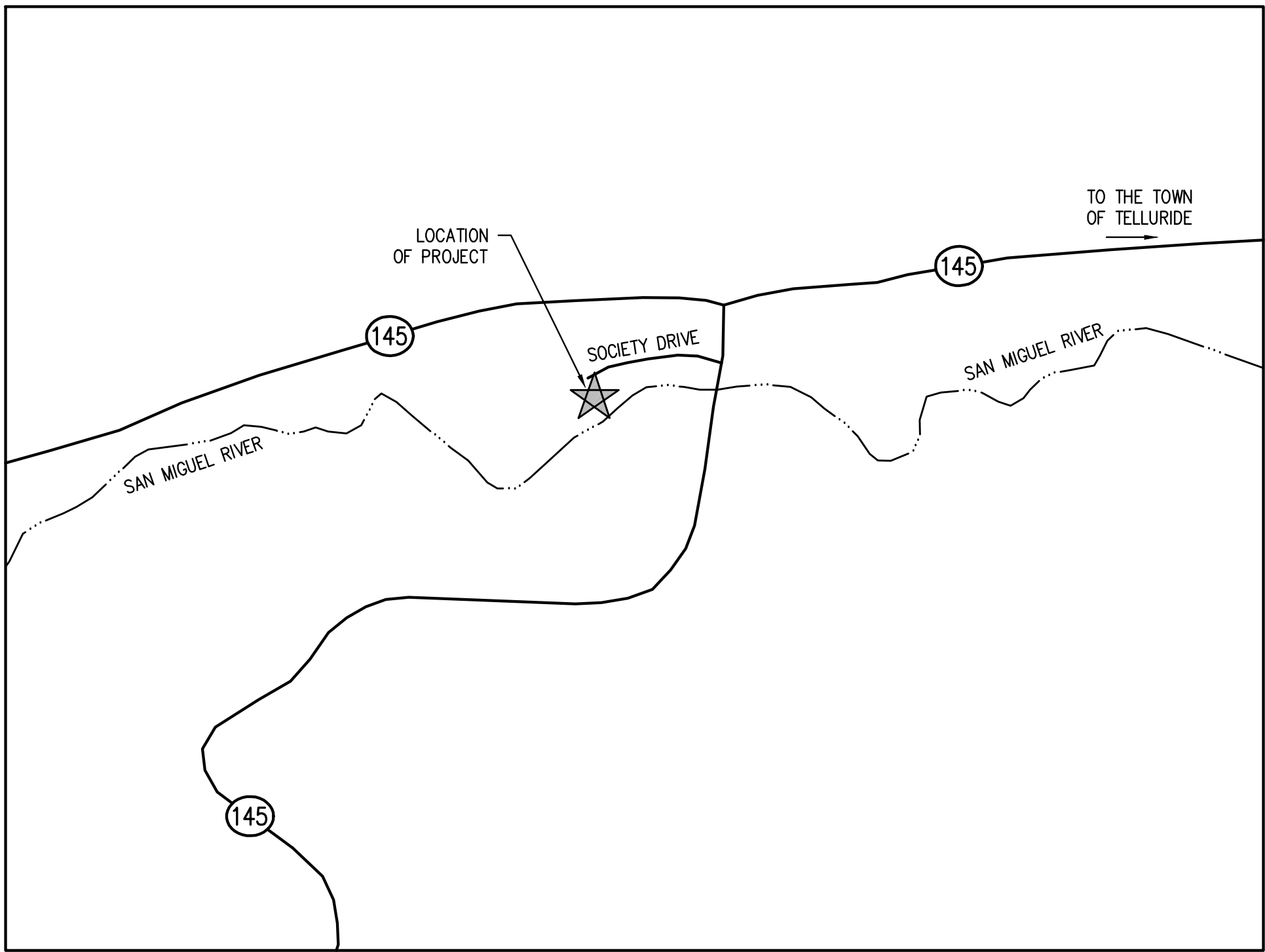
JVA, Inc.

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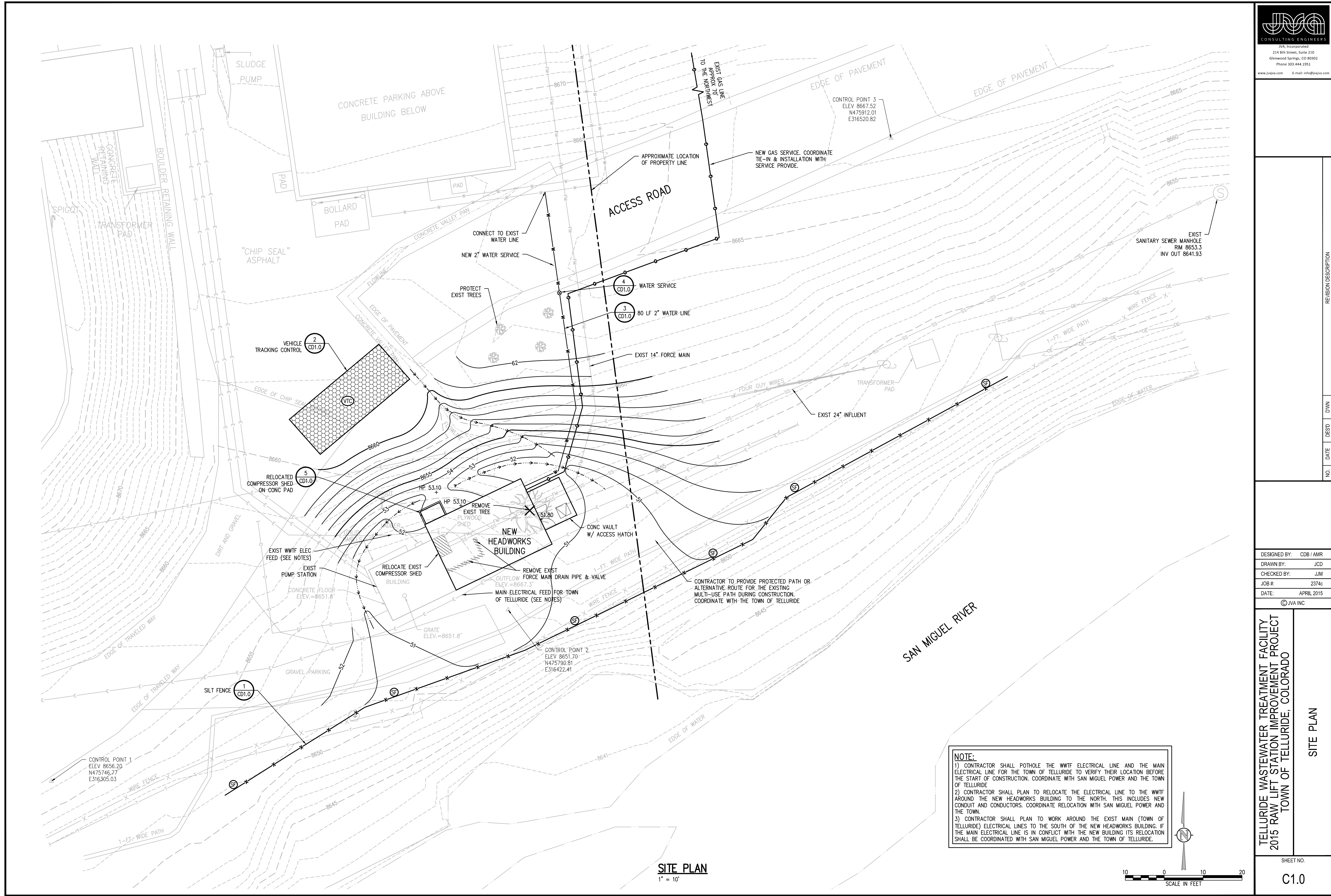
PROJECT LOCATION MAP
NTS

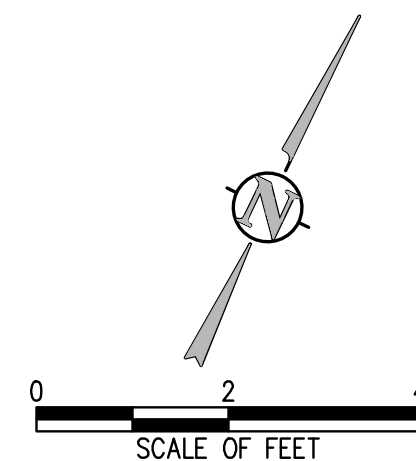
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ABBREVIATIONS										LEGEND										GENERAL NOTES:									
AB	ANCHOR BOLT	F/F	FACE TO FACE	N	NITROGEN	SM	SMOOTH																						
ABAN	ABANDON	FCA	FLANGE COUPLING ADAPTER	NAC	NoOCL SUPPLY LINE	SPACE (ING)	SPACE (ING)																						
ABC	AGGREGATE BASE COURSE	FD	FLOOR DRAIN	NAL	NoAIO2 SUPPLY LINE	SPEC	SPECIFICATION																						
AC	AIR CONDITIONING	FDN	FOUNDATION	NIC	NOT IN CONTRACT	SO	SQUARE																						
ACKV	AUTOMATIC CHECK VALVE	FED	FEDERAL	NP	NO PAINT	SO IN	SQUARE INCH																						
ACVUS	ACOUSTICAL	FES	FLARED END SECTION	NPL	NAMEPLATE	SO YD	SQUARE YARD																						
ACP	ASPHALTIC CONCRETE PAVING	FIN	FINISH	NPT	NATIONAL PIPE THREAD	SS	SANITARY SEWER																						
ACTR	ACTUATOR	FIN FL	FINISH FLOOR	NPW	NON-POTABLE WATER	SST	STAINLESS STEEL																						
AD	AREA DRAIN OR ACCESS DOOR	FIN GR	FINISH GRADE	NRS	NON-RISING STEM	SST BT	STAINLESS STEEL BOLT																						
ADDL	ADDITIONAL	FL	FLOWLINE	NS	NEAR SIDE	STA	STATION																						
ADDM	ADDENDUM	FLR	FLOOR	NTS	NOT TO SCALE	STD	STANDARD																						
ADJ	ADJUSTABLE	FF	FLOOR FINISH			STL	STEEL																						
AFF	ABOVE FINISHED FLOOR	FN	FENCE			STL JST	STEEL JOIST																						
AFG	ABOVE FINISHED GRADE	FOC	FACE OF CONCRETE	OC	ON CENTER	STL PL	STEEL PLATE																						
AHU	AIR HANDLING UNIT	FPM	FEET PER MINUTE	OD	OUTSIDE DIAMETER	STRUCT	STRUCTURAL																						
AL	ALUMINUM	FP	FEED POINT	OF	OUTSIDE FACE	STRUCT STL	STRUCTURAL STEEL																						
ALT	ALTERNATE	FPS	FEET PER SECOND	OPNG	OPENING	SUPP	SUPPLY																						
AMT	AMOUNT	FPW	FIRE PROTECTION WATER SUPPLY	OPP	OPPOSITE	SUSP CLG	SUSPENDED CEILING																						
APPROX	APPROXIMATE	FR	FRAME	OPT	OPTIONAL	SV	SOLENOID VALVE																						
ARCH	ARCHITECT(URAL)	FRP	FIBERGLASS REINFORCED PLASTIC			SVC	SERVICE																						
ARV	AIR RELIEF VALVE	FSTNR	FASTENER	P	PUMP	SW	SIDEWALK																						
ASME	AMERICAN SOCIETY MECHANICAL ENGINEERS	FT	FEET	PAR	PARALLEL	SWMP	STORM WATER MANAGEMENT PLAN																						
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FTG	FOOTING OR FITTING	PC	POINT OF CURVE, OR	SYMM	SYMMETRICAL																						
ASPH	ASPHALT	FUR	FURNACE	PC	POINT OF CURVE, OR	SYS	SYSTEM																						
ASSY	ASSEMBLY																												
ASYM	ASYMMETRICAL	G	GAS	PCO	PRESSURE CLEAN OUT	T	TEE																						
ATS	AUTOMATIC TRANSFER SWITCH	GA	GAUGE	POP	POINT OF CURVE RETURN	T&B	TOP AND BOTTOM																						
AUTO	AUTOMATIC	GAL	GALLON	PCR	PUMP DISCHARGE LINE	T&G	TONGUE AND GROOVE																						
AVG	AVERAGE	GALV	GALVANIZED	PD	PLAIN END	T&P	TEMPERATURE AND PRESSURE																						
AVS	AUTOMATIC VALVE STATION	GND	GROUND	PE	PLAIN END	TB	TOP OF BEAM																						
B	BLOWER	GPD	GALLONS PER DAY	PERM	PERMANENT	TBC	TOP BACK OF CURB																						
B&F	BELL AND FLANGE	GPM	GALLONS PER MINUTE	PERP	PERPENDICULAR	TBM	TOP OF CURB																						
BB	BOND BEAM	GR	GRADE	PI	POINT OF INTERSECTION	TE	TEMPORARY BENCH MARK																						
BAF	BAFFLE	GR BM	GRADE BEAM	PVC	POINT OF INTERSECTION FOR VERTICAL CURVE	TEMP	TEMPORARY																						
BC	BACK OF CURB	GRC	GALVANIZED RIGID CONDUIT	PL	PLATE OR PROPERTY LINE	TF	TOP OF FOOTING																						
BE	BELL END	GRTG	GRATING	PLBG	PLUMBING	TFA	TO FLOOR ABOVE																						
BF	BOTTOM FACE	GSP	GALVANIZED STEEL PIPE	PPLYWD	PLYWOOD	TFB	TO FLOOR BELOW																						
BFV	BUTTERFLY VALVE	GV	GATE VALVE	PNT	PAINT	TFD	TO FINISH FLOOR																						
BLDG	BUILDING	GWB	GYPSUM WALL BOARD	PNT	PAINT	THK	THICK																						
BLK	BLOCK	H	HIGH	POLY	POLYETHYLENE	TJ	TOP OF JOIST																						
BM	BENCH MARK	HB	HOSE BIB	PORT	PORTABLE	TOB	TOP OF BANK																						
BMP5	BEST MANAGEMENT PRACTICES	HDWL	HEADWALL	POS	POSITIVE	TOC	TOP OF CONCRETE OR TOP OF CURB																						
BOD	BIOCHEMICAL OXYGEN DEMAND	HNDRL	HAND RAIL	PRCST	PRECAST	TOE	THREADED ONE END																						
BOT	BOTTOM	HNDWL	HANDWHEEL	PREFAB	PREFABRICATED	TOF	TOP OF FOOTING																						
BS	BACKSIGHT	HORIZ	HORIZONTAL	PREFIN	PREFINISHED	TOT	TOTAL																						
BSMT	BASEMENT	HP	HORSEPOWER	PRELIM	PRELIMINARY	TP	TOP OF PAVEMENT																						
BU	BELL UP	HR	HOUR	PREP	PREPARATION	TR	TOP OF RIM																						
BV	BALL VALVE	HS	HIGH STRENGTH	PROJ	PROJECT	TSL	TOP OF SLAB																						
BCV	BUTTERFLY CHECK VALVE	HVAC	HEATING, VENTILATION, AIR CONDITIONING	PROP	PROPERTY	TST	TOP OF STEEL																						
C/C	CENTER TO CENTER	HW	HOT WATER	PRS	PRESSURE REDUCING STATION	TW	TOP OF WALL																						
CA	CITRIC ACID SUPPLY LINE	HWL	HIGH WATER LINE	PRV	PRESSURE REDUCING VALVE OR PRESSURE RELIEF VALVE	TYP	TYPICAL																						
CAB	CATCH BASIN	HYD	HYDRANT	PS	PIPE SUPPORT	UBC	UNIFORM BUILDING CODE																						
CCW	COUNTER CLOCKWISE	PSF	POUNDS PER SQUARE FOOT	PSI	POUNDS PER SQUARE INCH	UNGD	UNDERGROUND																						
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	PSIA	POUNDS PER SQUARE INCH ABSOLUTE	PSIG	POUNDS PER SQUARE INCH GAGE	UL	UNDERGROUND ELECTRIC																						
CEB	CONCRETE EQUIPMENT BASE	PT	POINT OF TANGENCY	PTD	POINT OF TANGENCY	ULTE	ULTIMATE																						
CHKV	CHECK VALVE	INF	INFLUENT	PTD	POINT OF TANGENCY	UNFIN	UNFINISHED																						
CIP	CAST IRON PIPE	INL	INLET	PTRV	PRESSURE TEMPERATURE RELIEF VALVE	UNIF	UNIFORM																						
CIJ	CAST IRON MECHANICAL JOINT	INSTL	INSTALLATION	PV	POLY VALVE	UNIV	UNIVERSAL																						
CISP	CAST IRON SOIL PIPE	INSTR	INSTRUMENT	PVC	POLY VINYL CHLORIDE	UTIL	UTILITY																						
CJ	CONSTRUCTION JOINT	INSUL	INSULATION	INV	INVERT	UV	ULTRAVIOLET																						
CL	CENTER LINE OR CHAIN LINK	INTR	INTERIOR	INV	INVERT	VAC	VACUUM																						
CLG	CEILING	INV	INVERT	INV EL	INVERT ELEVATION	VB	VALVE BOX																						
CLR	CLEAR	ISA	INSTRUMENT SOCIETY OF AMERICA	ISO	ISOMETRIC	VCP	VITRIFIED CLAY PIPE																						
CMP	CORRUGATED METAL PIPE	JST	JOIST	JTS	JOINTS	VERT	VERTICAL																						
CMU	CONCRETE MASONRY UNIT	KO	KNOCKOUT	KPL	KICK PLATE	VNT	VENT THROUGH ROOF																						
CO	CLEAN OUT	KNY	KEYWAY	L	LEFT OR UTER	W	WIDE OR WIDTH																						
CONC	CONCRETE	LAB	LABORATORY	LSCAPE	LANDSCAPE(ING)	W/O	WITHOUT																						
CONSTR	CONSTRUCTION	LATL	LATERAL	LAV	LAVATORY	W/W	WALL TO WALL																						
CONT	CONTINUOUS(ATION)	LB(S)	POUND(S)	LCMU	LIGHTWEIGHT CONCRETE	WC	WATER CLOSET																						
CP	CENTRIFUGAL PUMP	LF	LINEAR FOOT	REC	RECEIVED	WCO	WALL CLEANOUT																						
CPLG	COUPLING	LG	LENGTH	REC	RECTANGULAR	WD	WIDE FLANGE																						
CPVC	CHLORINATED POLYVINYL CHLORIDE	LH	LATENT HEAT	REF	REFERENCE	WH	WALL HYDRANT																						
CR	CONCENTRIC REDUCER	LK	LOCKER	REF	REFERENCE	WHSE	WAREHOUSE																						
CTR	CENTER	LKR	LOCKER	REF	REFERENCE	WI	WROUGHT IRON																						
CV	CHECK VALVE	LL	LIVE LOAD, LOOSE LINTEL	REIN	REINFORCE (D) (ING) (MENT)	WL	WATER LINE OR WND LOAD																						
CW	COLD WATER	LLC	LOCATION	REQD	REQUIRED	WP	WASTE PIPE																						
CY	CUBIC YARDS	LN	LOW PRESSURE OR LIGHT POLE	RESIL	RESILIENT	WPR	WORKING PRESSURE																						
DCO	DOUBLE CLEAN OUT	LRG	LARGE	RFC	RESTRAINED FLANGED COUPLING ADAPTER	WQCE	WATER QUALITY CONTROL ELEVATION																						
DEMO	DEMOLITION	LT	LIGHT	RFG	ROOFING	WS	WETTED SURFACE																						
D	DIAGONAL	LT WT	LIGHTWEIGHT	RM	ROOM	WSE	WATER SURFACE ELEVATION																						
DIA	DIAMETER	LWL	LOW WATER LEVEL	RND	ROUND	WT	WEIGHT																						
DIAG	DIAGONAL			RO	ROUGH OPENING	WTR	WATER																						
DIM	DIMENSION			ROW	RIGHT OF WAY	WTRPF	WATERPROOFING																						
DIP	DUCTILE IRON PIPE			RBPB	REDUCED PRESSURE BACKFLOW PREVENTER	WW	WASTEWATER																						
DISP	DISPENSER			RPM	REVOLUTIONS PER MINUTE	WWF	WELDED WIRE FABRIC																						
DL	DEAD LOAD			RPS	REVOLUTIONS PER SECOND	X SECT	CROSS SECTION																						
DMJ	DUCTILE MECHANICAL JOINT			RR	RAILROAD	YCO	YARD CLEANOUT																						
DN	DOWN			RRAS	RAPID RETURN ACTIVATED SLUDGE RETURN	YD	YARD DRAIN																						
DR	DRAIN					YH	YARD HYDRANT																						
DWG	DRAWING					YR	YEAR																						
DWL	DOWEL																												
DWN	DRAWN																												
DWV	DRAIN WASTE AND VENT																												
EA	EACH																												
ECC	ECCENTRIC																												
EF	EACH FACE OR ELECTRICAL FAN																												
EFF	EFFLUENT																												
EJ	EXPANSION JOINT																												
EL	ELEVATION																												
ELB	ELBOW																												
ELEC	ELECTRICAL																												
ENGR	ENGINEER																												
EOA	EDGE OF ASPHALT																												
EOP	EDGE OF PAVEMENT																												
EQ	EQUAL																												
EOL SP	EQUALLY SPACED																												
EQUIP	EQUIPMENT																												
EQUIV	EQUIVALENT																												
ESMT	EASEMENT																												
EST	ESTIMATE																												
EUH	ELECTRIC UNIT HEATER																												
EW	EACH WAY																												
EXH	EXHAUST																												
EXP BT(S)	EXPANSION BOLT(S)																												
EXP JT	EXPANSION JOINT																												
EXIST	EXISTING																												
EXIST GR	EXISTING GRADE																												
EXT	EXTERIOR																												
EXTN	EXTENSION																												

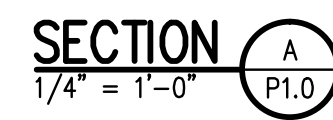
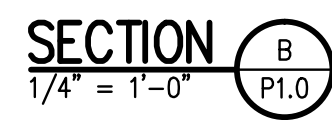
LEGEND									
POWER POLE									
TRANSFORMER									
FIRE HYDRANT									
SEWER MANHOLE									
WATER VALVE									
PROPOSED INDEX CONTOUR									
PROPOSED INTERMEDIATE CONTOUR									
EXIST INDEX CONTOUR									
EXIST INTERMEDIATE CONTOUR									
CONCRETE PAVING									
PROPOSED BUILDING									
EXIST BUILDING									
DEMO (REMOVE) TREE									
DEMO OR ABANDON									
LIMITS OF SAWCUT									
LIMITS OF WORK									
PROPERTY LINE / ROW									
VEHICLE TRACKING CONTROL									
SILT FENCE									
CABLE TV									
DRAIN									
ELECTRIC									
UNDERGROUND ELECTRIC									
OVERHEAD ELECTRIC									
TELEPHONE									
FIBER OPTIC									
FLOOR DRAIN									
FOUNDATION DRAIN									
FORCE MAIN									
FUEL									
GAS									
IRRIGATION									
ROOF DRAIN									
STORM DRAIN - LARGER PIPE									
STORM DRAIN - SMALLER PIPE									
SANITARY SEWER									
TRENCH DRAIN									
UNDERDRAIN									
VALVE BOX									
VITRIFIED CLAY PIPE									
VERTICAL									
VENT PIPE									
VENT THROUGH ROOF									
WIDE OR WIDTH									
WITH									
WITHOUT									
WALL TO WALL									
WASTE ACTIVATED SLUDGE									
WATER CLOSET									
WALL CLEANOUT									
WIDTH OR WOOD									
WINDOW									
WIDE FLANGE									
WALL HYDRANT									
WAREHOUSE									
WROUGHT IRON									
WATER LINE OR WND LOAD									
WASTE PIPE									
WORKING PRESSURE									
WATER QUALITY CONTROL ELEVATION									
WETTED SURFACE									
WATER SURFACE ELEVATION									
WEIGHT									
WATER									
WATERPROOFING									
WASTEWATER									
WELDED WIRE FABRIC									
NOTE: SHADED ITEMS REPRESENT EXIST FEATURES									

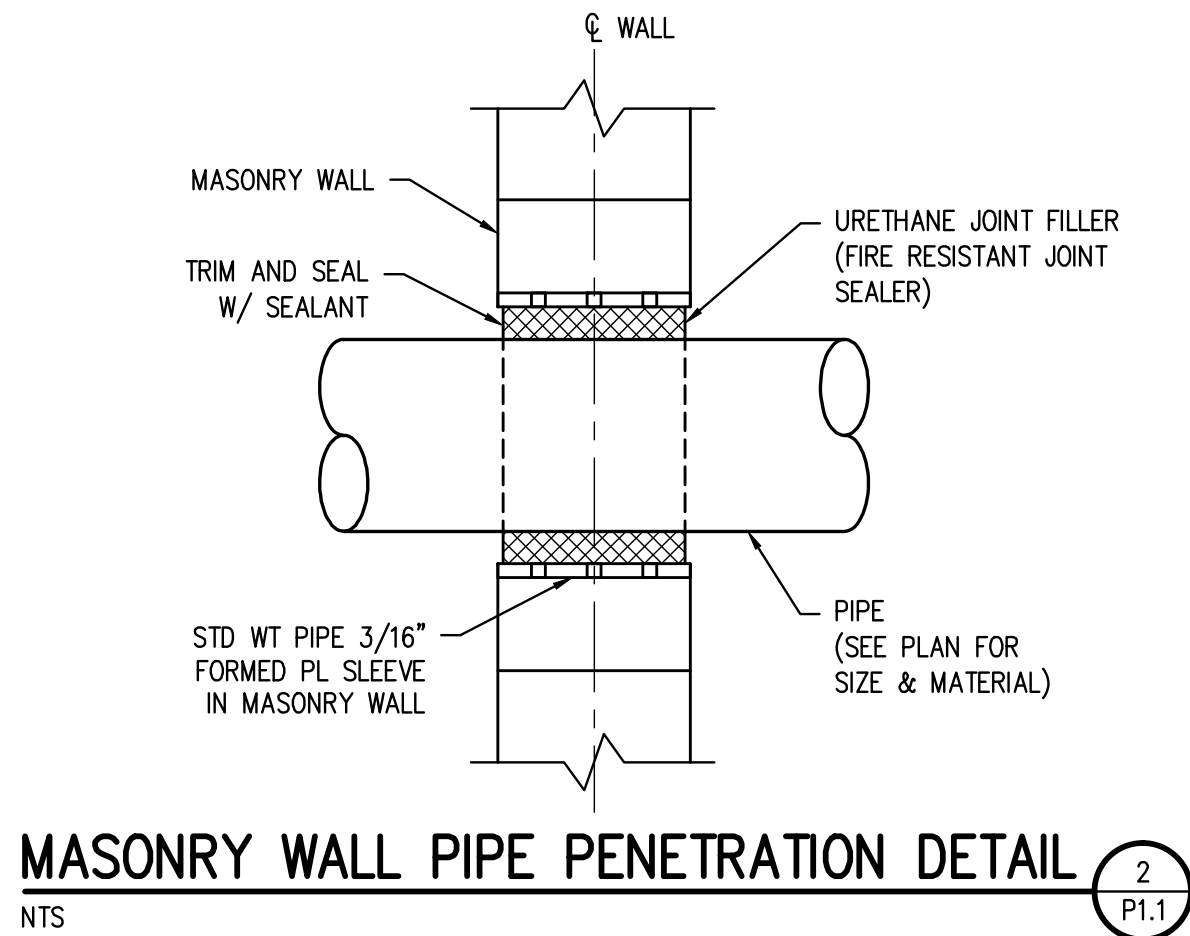
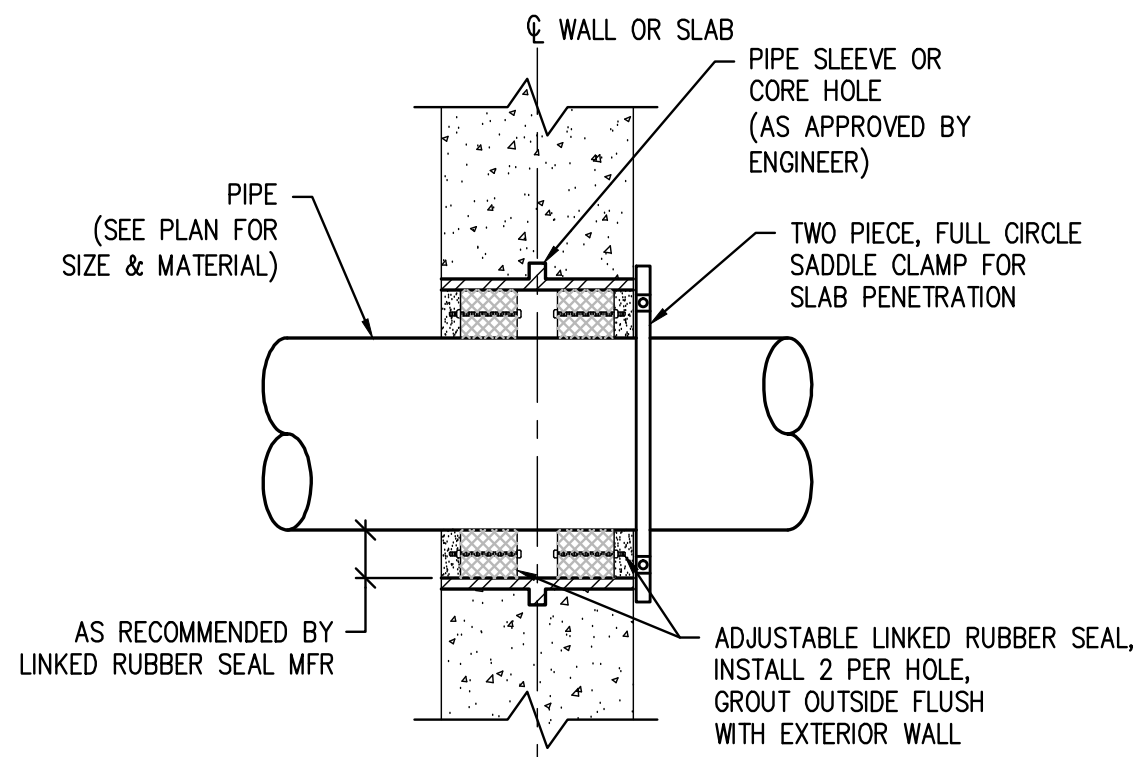
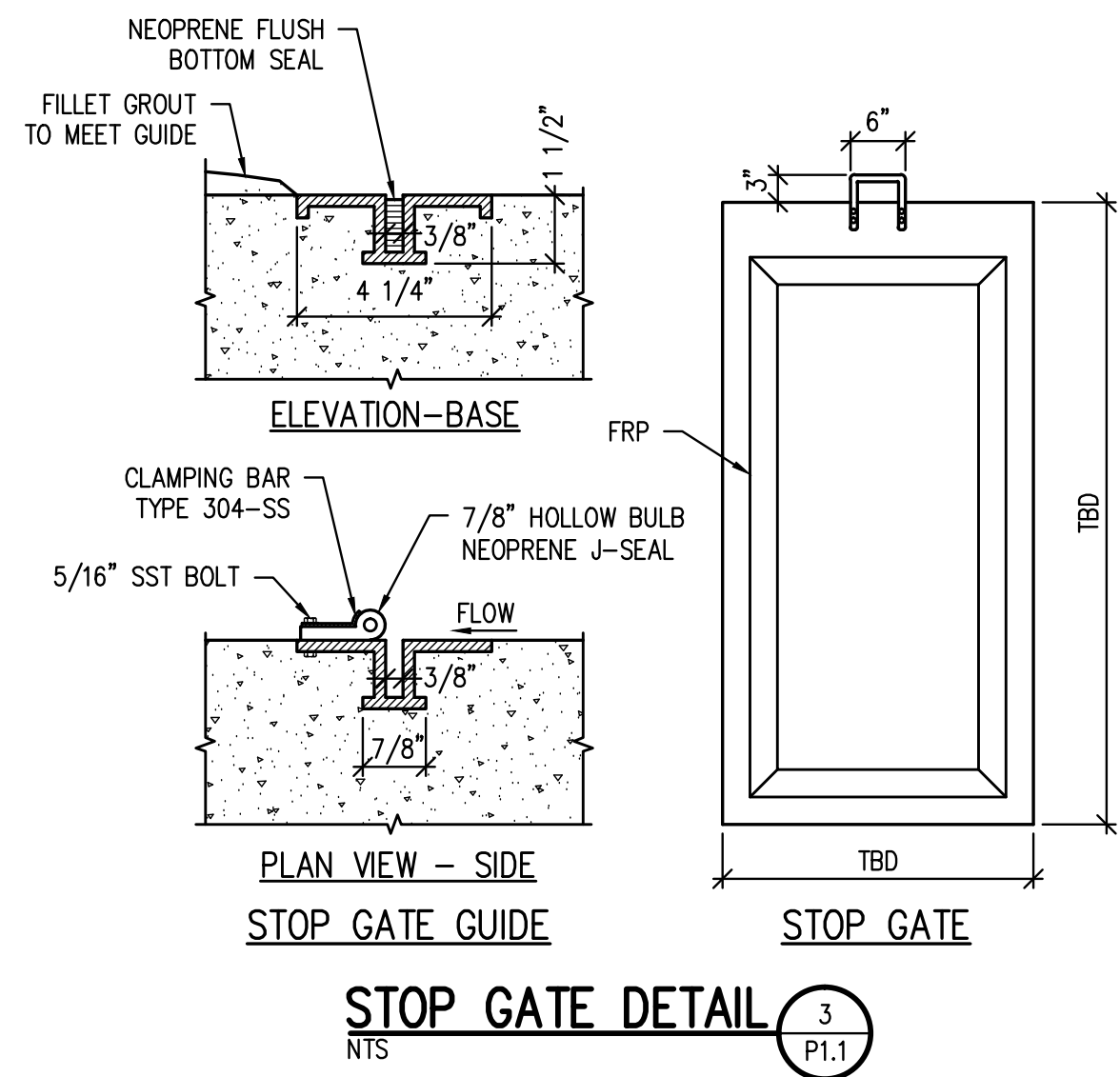
GENERAL NOTES:									
1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE TOWN OF TELLURIDE, TELLURIDE FIRE PROTECTION DISTRICT REQUIREMENTS, AND APPLICABLE STATE AND LOCAL STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN POSSESSION AT THE JOB SITE AT ALL TIMES ONE (1) SIGNED COPY OF APPROVED PLANS, STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EMERGENCY ACCESS ROUTES TO THE SITE AND STRUCTURE AT ALL TIMES PER THE APPLICABLE TELLURIDE FIRE PROTECTION DISTRICT REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS. NOTIFY ENGINEER OF ANY CONFLICTING STANDARDS OR SPECIFICATIONS. IN THE EVENT OF ANY CONFLICTING STANDARD OR SPECIFICATION, THE MORE STRINGENT OR HIGHER QUALITY STANDARD, DETAIL OR SPECIFICATION SHALL APPLY.									
2. THE CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARD SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, INCLUDING, BUT NOT LIMITED TO A LOCAL AND STATE GROUNDWATER DISCHARGE AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT (CDPHE) STORMWATER DISCHARGE PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITY.									
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE TOWN OF TELLURIDE AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. PRIOR TO BACKFILLING, AND AS REQUIRED BY THE TOWN OF TELLURIDE AND PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL CONTINUE WITH NOTIFICATIONS THROUGHOUT THE PROJECT AS REQUIRED BY THE STANDARDS AND SPECIFICATIONS.									
4. THE LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION BASED ON INFORMATION BY OTHERS. NOT ALL UTILITIES MAY BE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT SIZE, LOCATION AND TYPE OF ALL EXISTING UTILITIES WHETHER SHOWN OR NOT BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO PROCEEDING WITH GRADING AND CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF UTILITIES SHALL BE PERFORMED AND INSPECTED ACCORDING TO THE REQUIREMENTS OF THE UTILITY OWNER. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MAPPING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION, AND FOR RELOCATING ENCOUNTERED UTILITIES AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL CONTACT AND RECEIVE APPROVAL FROM MUNICIPALITY/UTILITY OWNER AND ENGINEER BEFORE RELOCATING ANY ENCOUNTERED UTILITIES. CONTRACTOR RESPONSIBLE FOR SERVICE CONNECTIONS, AND RELOCATING AND RECONNECTING AFFECTED UTILITIES AS COORDINATED WITH UTILITY OWNER AND/OR ENGINEER, INCLUDING NON-MUNICIPAL UTILITIES (TELEPHONE, GAS, CABLE, ETC., WHICH SHALL BE COORDINATED WITH THE UTILITY OWNER). THE CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER UPON DISCOVERY OF A UTILITY DISCREPANCY OR CONFLICT. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1987, WWW.UCCO.ORG).									
5. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR OWNER AND/OR CITY APPROVAL AND PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR AGREES TO COMPLY WITH THE PROVISIONS OF THE TRAFFIC CONTROL PLAN AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," PART VI, FOR CONSTRUCTION SIGNAGE AND TRAFFIC CONTROL. ALL TEMPORARY AND PERMANENT TRAFFIC SIGNS SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REGARD TO SIGN SHAPE, COLOR, SIZE, LETTERING, ETC. UNLESS OTHERWISE SPECIFIED. IF APPLICABLE, PART NUMBERS ON SIGNAGE DETAILS REFER TO MUTCD SIGN NUMBERS.									
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ADJUTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS.									
7. RIM AND GRATE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL ADJUST RIMS AND OTHER IMPROVEMENTS TO MATCH FINAL PAVEMENT AND FINISHED GRADE ELEVATIONS.									
8. THE EXISTING AND PROPOSED ELEVATIONS OF FLATWORK, SIDEWALKS, CURBS, PAVING, ETC. AS SHOWN HEREON ARE BASED ON EXTRAPOLATION OF FIELD SURVEY DATA AND EXISTING CONDITIONS. AT CRITICAL AREAS AND SITE FEATURES, CONTRACTOR SHALL HAVE FORMWORK INSPECTED AND APPROVED BY OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER PRIOR TO PLACING CONCRETE. MINOR ADJUSTMENTS, AS APPROVED, TO PROPOSED GRADES, INVERTS, ETC. MAY BE REQUIRED TO PREVENT PONDING OR SLOPE NOT IN CONFORMANCE WITH MUNICIPAL STANDARDS. ALL FLATWORK MUST PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE AWAY FROM EXISTING AND PROPOSED BUILDINGS, WALLS, ROOF DRAIN OUTFALLS, ACROSS DRIVES AND WALKS, ETC., TOWARDS THE PROPOSED INTENDED DRAINAGE FEATURES AND CONVEYANCES.									
9. FINAL LIMITS OF REQUIRED ASPHALT SAWCUTTING AND PATCHING MAY VARY FROM LIMITS SHOWN ON PLANS. CONTRACTOR TO PROVIDE SAWCUT AND PATCH WORK TO ACHIEVE POSITIVE DRAINAGE AND A SMOOTH TRANSITION TO EXISTING ASPHALT WITHIN SLOPES ACCEPTABLE TO THE ENGINEER AND WITHIN MUNICIPAL STANDARDS. CONTRACTOR SHALL PROVIDE ADDITIONAL SAWCUTTING AND PATCHING AT UTILITY WORK, CONNECTION POINTS TO EXISTING PAVEMENT AND FEATURES, ETC. THAT MAY NOT BE Delineated ON PLANS.									
10. ANY EXISTING MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC. TO BE PROTECTED AND TO REMAIN IN SERVICE. IF FEATURES EXIST, EXTEND OR LOWER TO FINAL SURFACE WITH LIKE KIND CAP WITH STANDARD CAST ACCESS LID WITH SAME MARKINGS. IN LANDSCAPED AREAS PROVIDE A CONCRETE COLLAR (18"x18"x6" THICK) AT ALL EXISTING AND PROPOSED MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC.									
11. OWNER TO APPROVE ALL CONCRETE FINISHING, JOINT PATTERNS AND COLORING REQUIREMENTS PRIOR TO CONSTRUCTION. SUBMIT JOINT LAYOUT PLAN TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.									
12. PIPE LENGTHS AND HORIZONTAL CONTROL POINTS SHOWN ARE FROM CENTER OF STRUCTURES, END OF FLARED END SECTIONS, ETC. SEE STRUCTURE DETAILS FOR EXACT HORIZONTAL CONTROL LOCATION. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ACTUAL PIPE LENGTHS TO ACCOUNT FOR STRUCTURES AND LENGTH OF FLARED END SECTIONS.									
13. ALL SURPLUS MATERIALS, TOOLS, AND TEMPORARY STRUCTURES, FURNISHED BY THE CONTRACTOR, SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR. ALL DEBRIS AND RUBBISH CAUSED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE REMOVED, AND THE AREA OCCUPIED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL CONDITION, WITHIN 48 HOURS OF PROJECT COMPLETION, UNLESS OTHERWISE DIRECTED BY THE MUNICIPALITY OR OWNER'S REPRESENTATIVE.									
14. THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE TOWN OF TELLURIDE, THE STATE OF COLORADO, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT "URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3", THE M-STANDARD PLANS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, AND THE APPROVED EROSION CONTROL PLAN. JURISDICTIONAL AUTHORITY MAY REQUIRE THE CONTRACTOR TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES AT THE CONTRACTOR'S EXPENSE DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE PLANS DO NOT FUNCTION AS									





HEADWORKS PLAN





CONTROL GATE SCHEDULE

GATE NUMBER	SIZE*	DESCRIPTION
HW01	24" (w) x 72" (h) x 84" (v)	TYPE S1D (SEE THIS SHEET)
HW02	24" (w) x 72" (h) x 84" (v)	TYPE S1D (SEE THIS SHEET)
HW03	24" (w) x 72" (h) x 84" (v)	TYPE S1D (SEE THIS SHEET)**
HW04	24" (w) x 72" (h) x 84" (v)	TYPE S1D (SEE THIS SHEET)

(v)=VERTICAL HEIGHT FROM INVERT TO FINISH FLOOR

*DIMENSIONS DUE NOT TAKE INTO ACCOUNT CHANNEL GROUT. CONTRACTOR TO VERIFY FINAL DIMENSIONS.

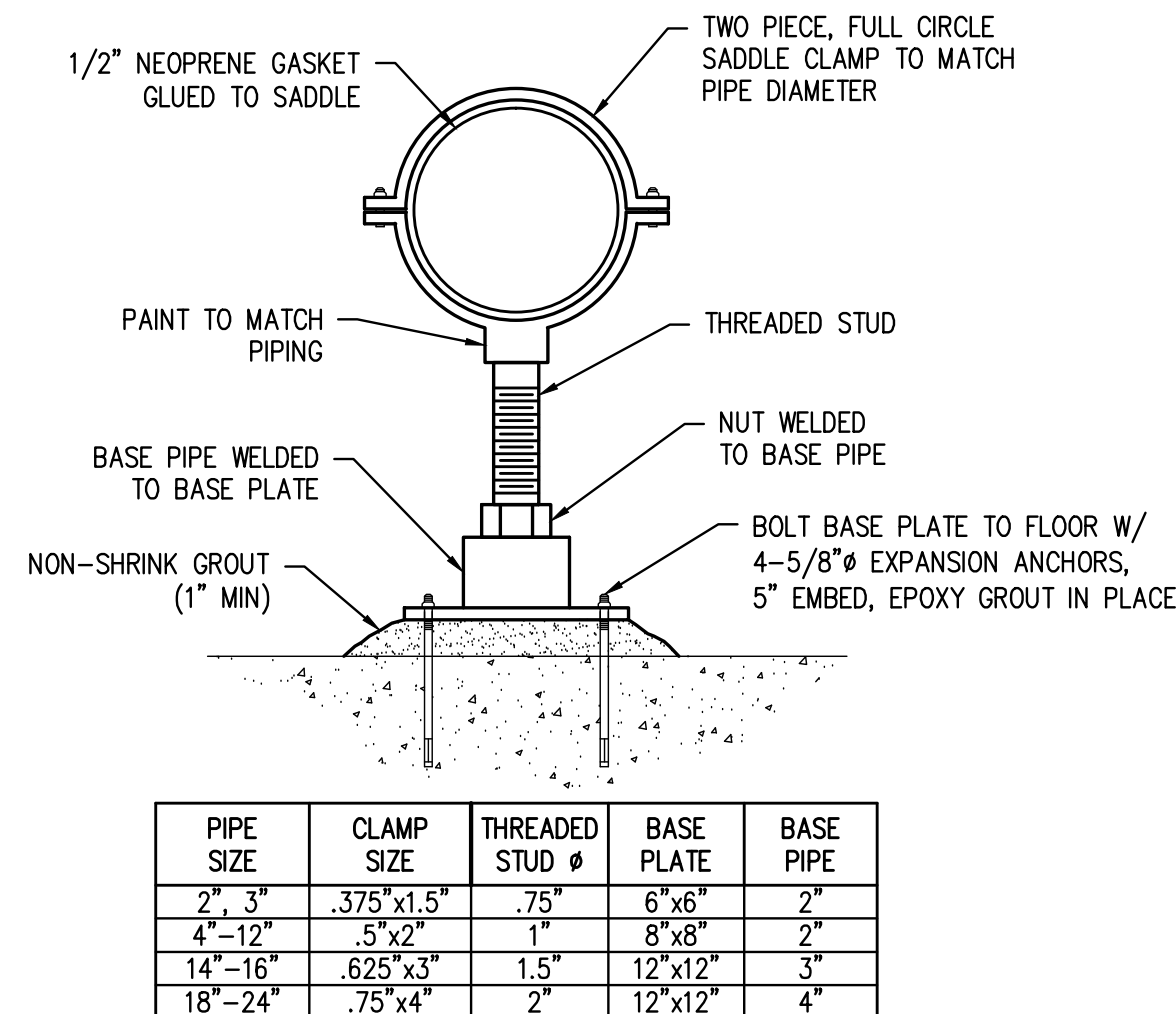
**PROVIDE OPENING (WEIR) IN GATE 30" ABOVE CHANNEL BOTTOM TO ACT AS AN AUTOMATIC BYPASS. OPENING SHALL BE 22" WIDE BY 15" TALL.

WATER CONTROL GATE KEY

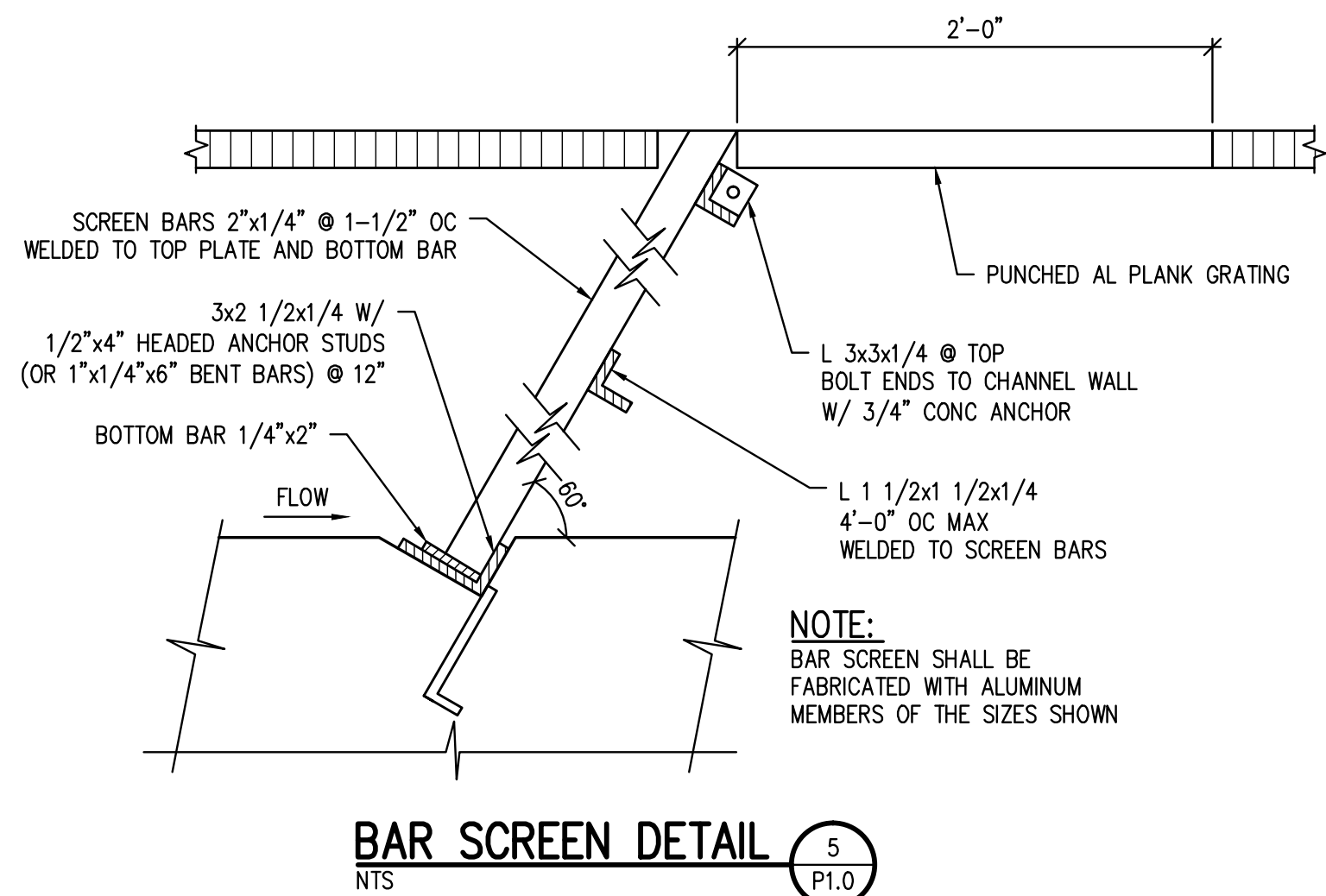
GATE TYPE	FRAME MOUNTING	ACTUATOR TYPE
S = SLUICE GATE W = DOWNWARD OPENING WEIR GATE	1 = IMBEDDED FRAME 2 = CONCRETE WALL MOUNT 3 = ROUND CONCRETE WALL MOUNT	A = CRANK OPERATOR B = 2" SQUARE NUT OPERATOR C = ELECTRIC ACTUATOR D = HANDWHEEL OPERATOR E = CRANK OPERATOR, DOUBLE STEM

EXAMPLE: A GATE LABELED AS TYPE W2A INDICATES A DOWNWARD OPENING WEIR GATE WITH WALL MOUNT AND CRANK ACTUATOR.

SLIDE GATE SCHEDULE/DETAIL 3 P1.1



PIPE SIZE	CLAMP SIZE	THREADED STUD Ø	BASE PLATE	BASE PIPE
2"-3"	.375"x1.5"	.75"	6"x6"	2"
4"-12"	.5"x2"	1"	8"x8"	2"
14"-16"	.625"x3"	1.5"	12"x12"	3"
18"-24"	.75"x4"	2"	12"x12"	4"



NOTE:
BAR SCREEN SHALL BE
FABRICATED WITH ALUMINUM
MEMBERS OF THE SIZES SHOWN

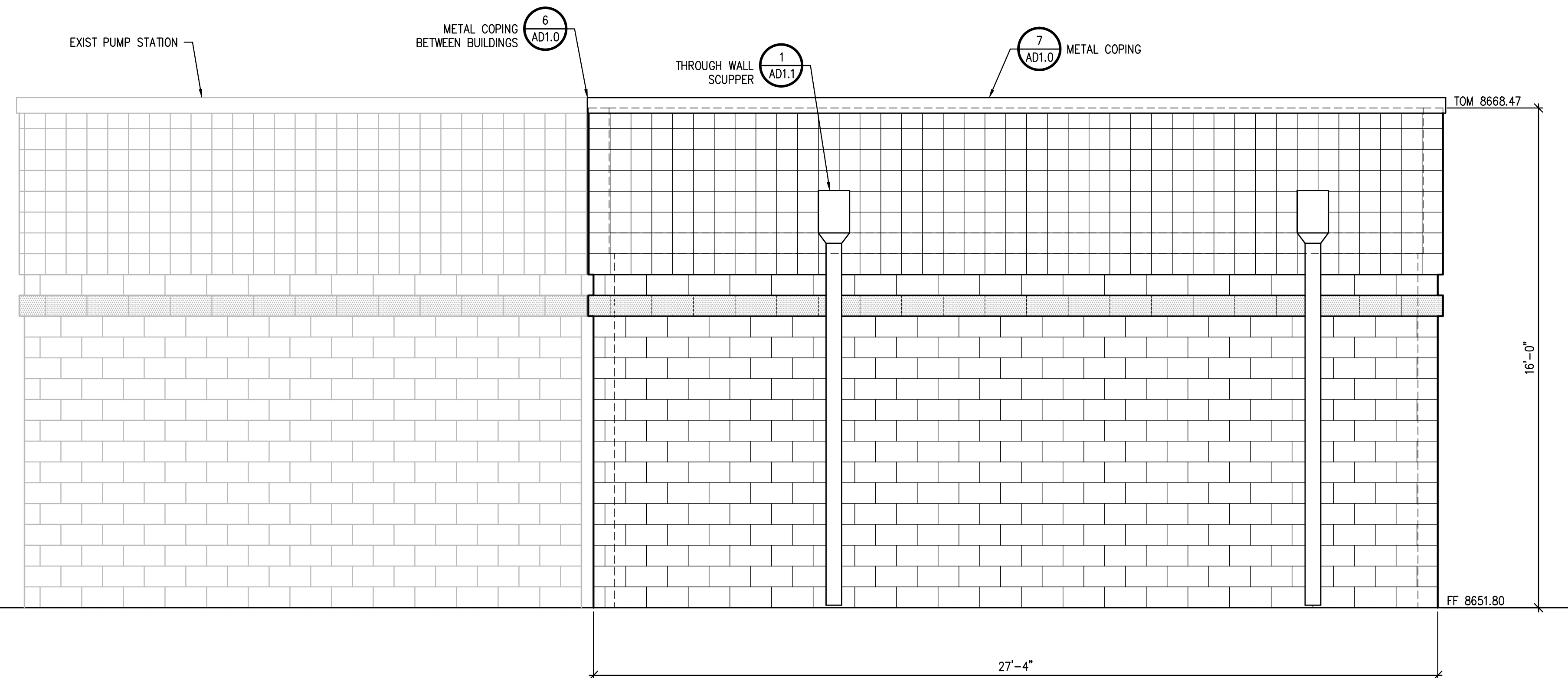
NO.	DATE	DESIGNED	DRAWN	REVISION DESCRIPTION

DESIGNED BY:	CDB / AMR
DRAWN BY:	JCD
CHECKED BY:	JJM
JOB #:	2374c
DATE:	APRIL 2015
	© JVA INC

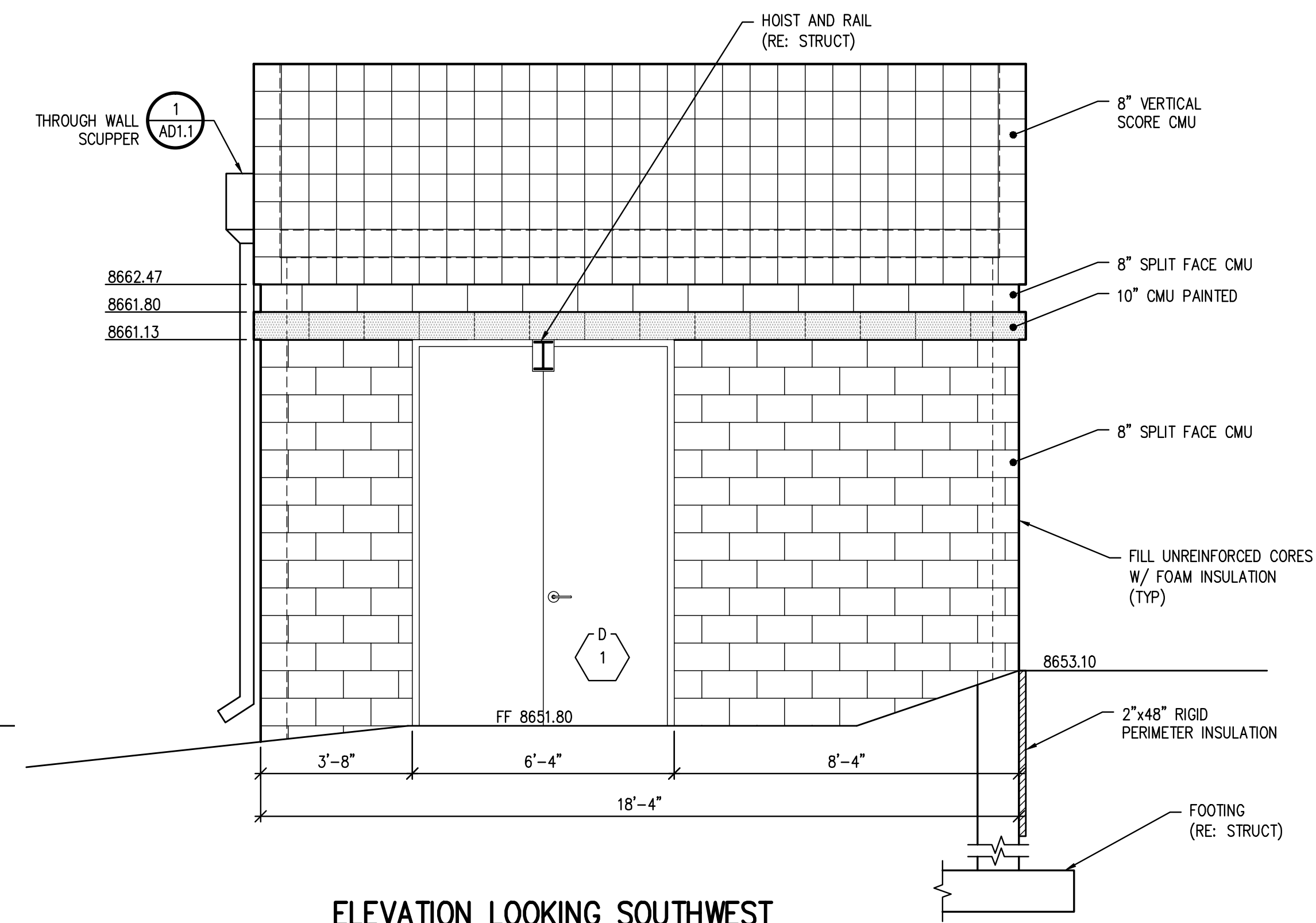
TELLURIDE WASTEWATER TREATMENT FACILITY 2015 RAW LIFT STATION IMPROVEMENT PROJECT TOWN OF TELLURIDE, COLORADO	PROCESS DETAILS
---	-----------------

SHEET NO.

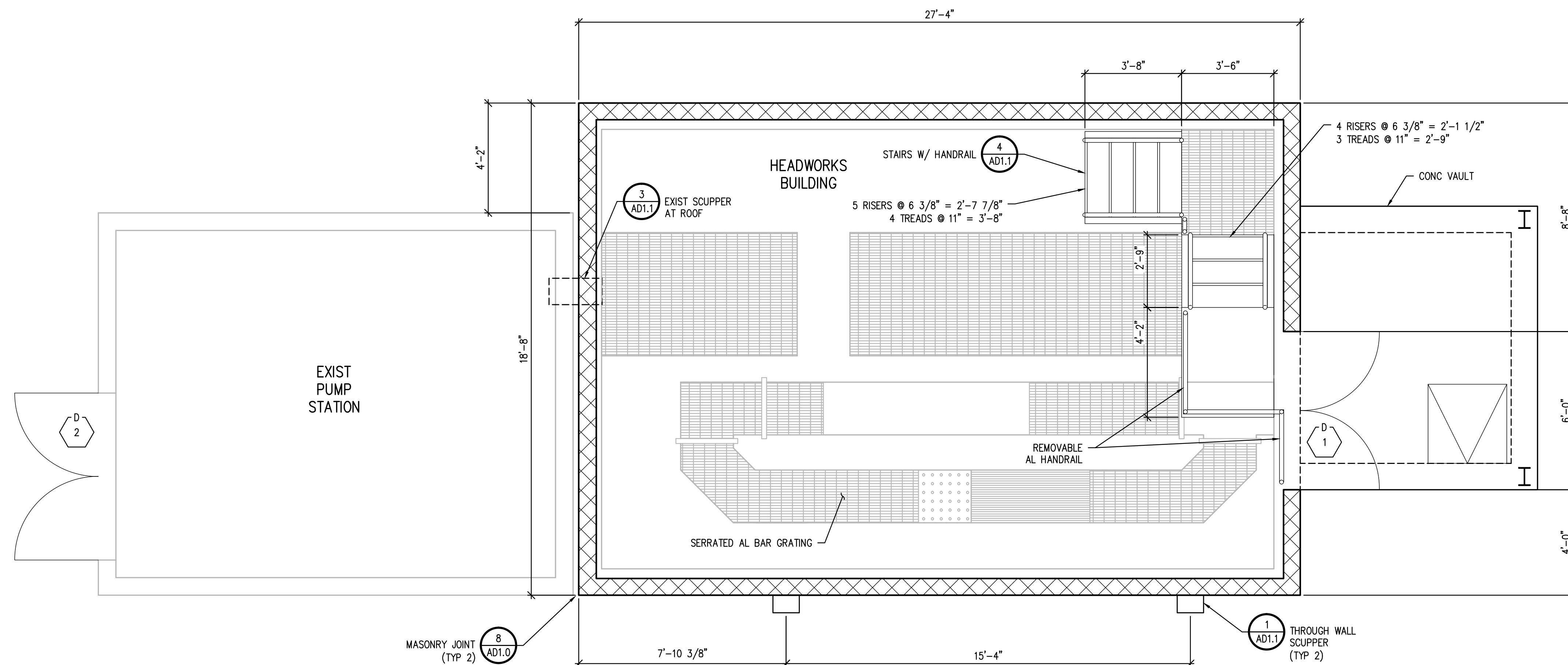
PD1.0



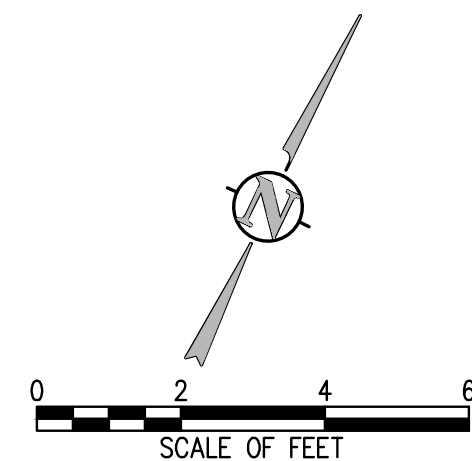
ELEVATION LOOKING NORTHWEST
3/8" = 1'-0"



ELEVATION LOOKING SOUTHWEST
3/8" = 1'-0"

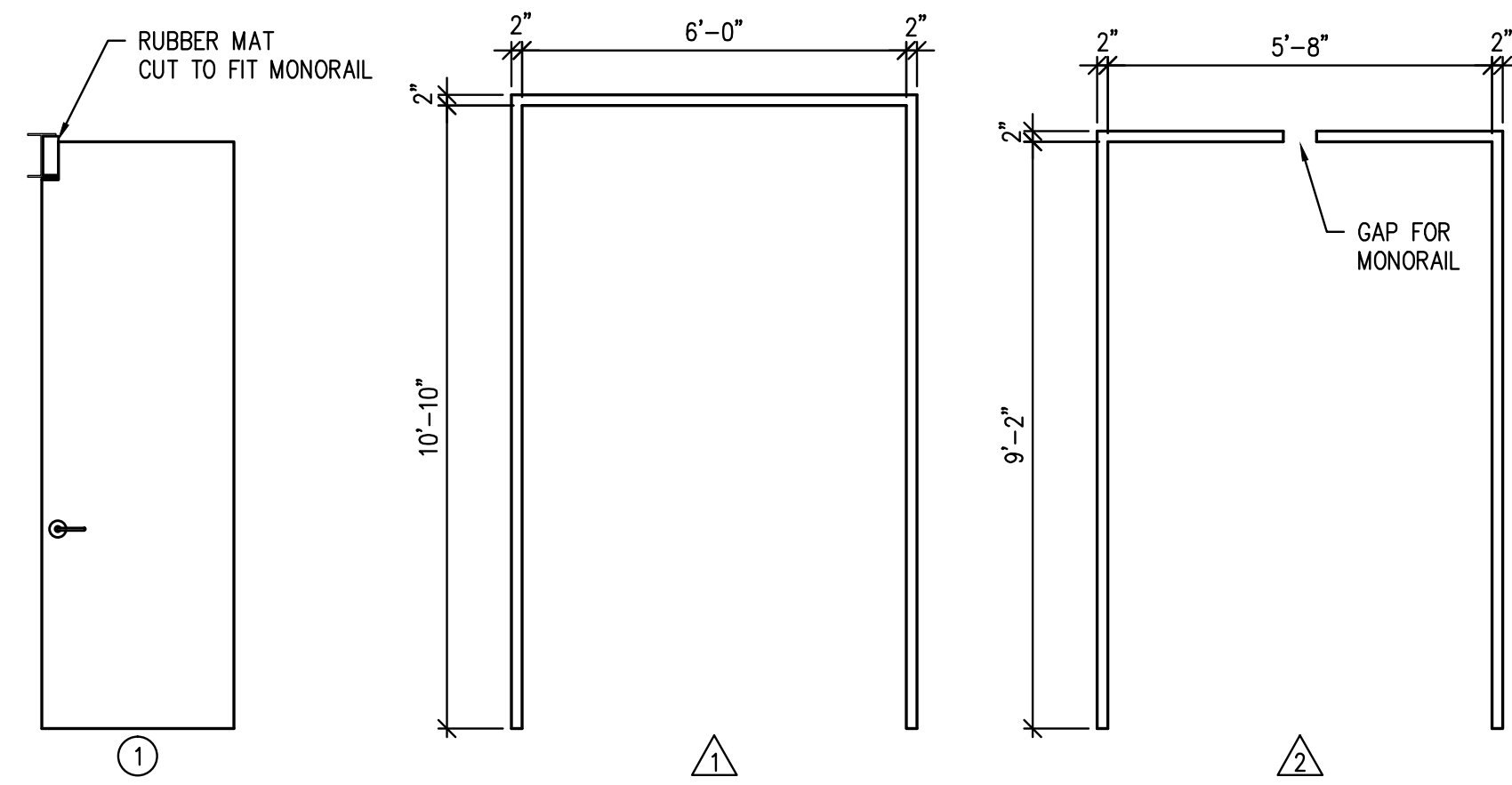


FLOOR PLAN
3/8" = 1'-0"



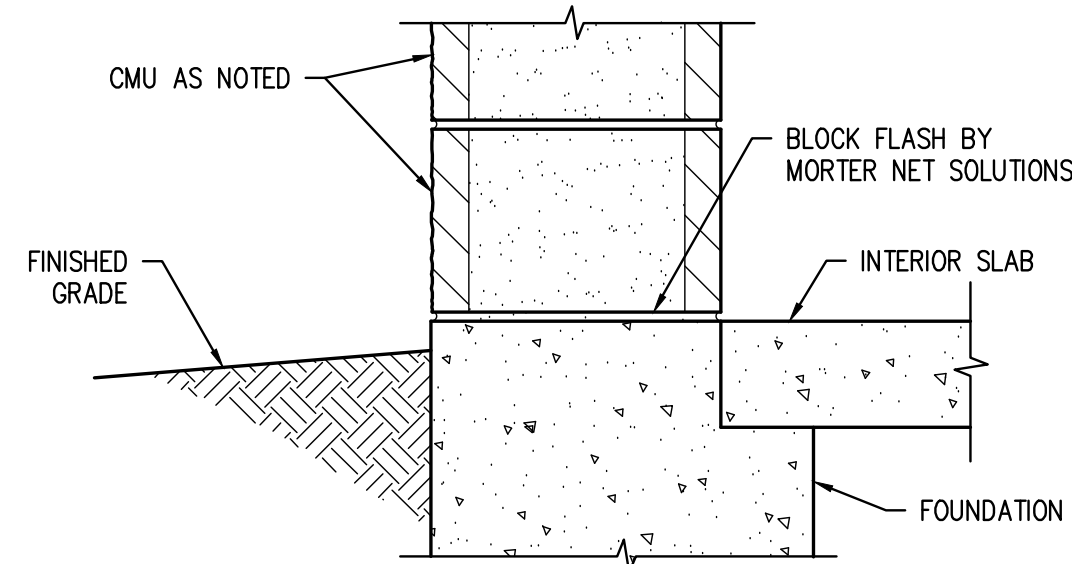
DOOR SCHEDULE							
DOOR NO.	DOOR *					FRAME	
	TYPE	SIZE		MAT'L	H.W.SET	TYPE	MAT'L
		WIDTH X HEIGHT	THK				
1	1	(2) 2'-10"x7'-2"	1-3/4"	AL	1	1	AL
2	1	(2) 3'-0"x10'-10"	1-3/4"	AL	1	2	AL

* ALL DOORS ARE TO BE INSULATED

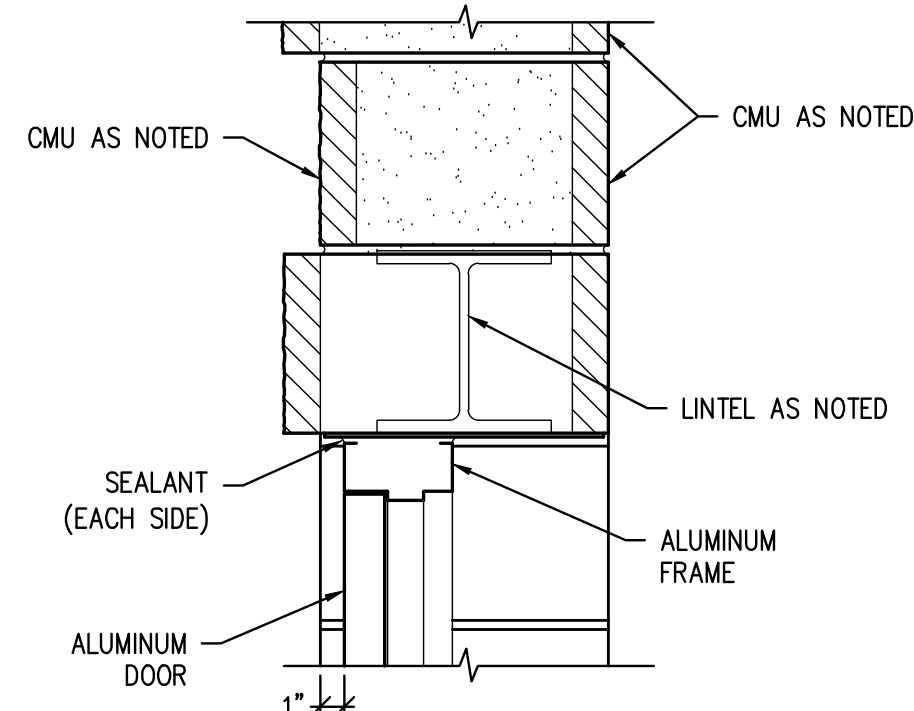


DOOR TYPE = ①

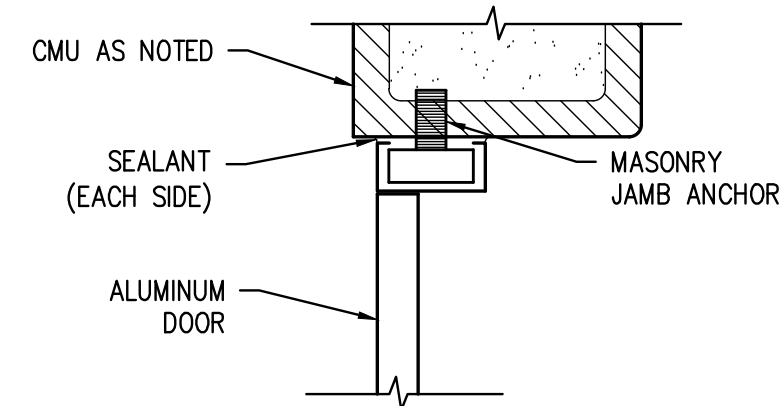
FRAME TYPE = ②



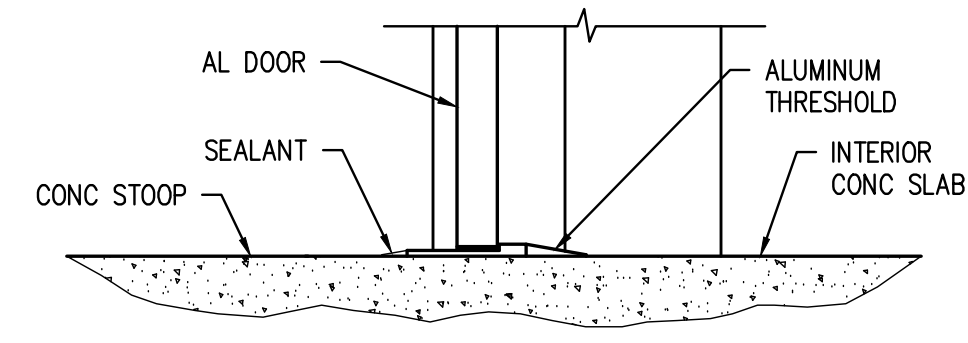
WALL BASE DETAIL ①
NTS



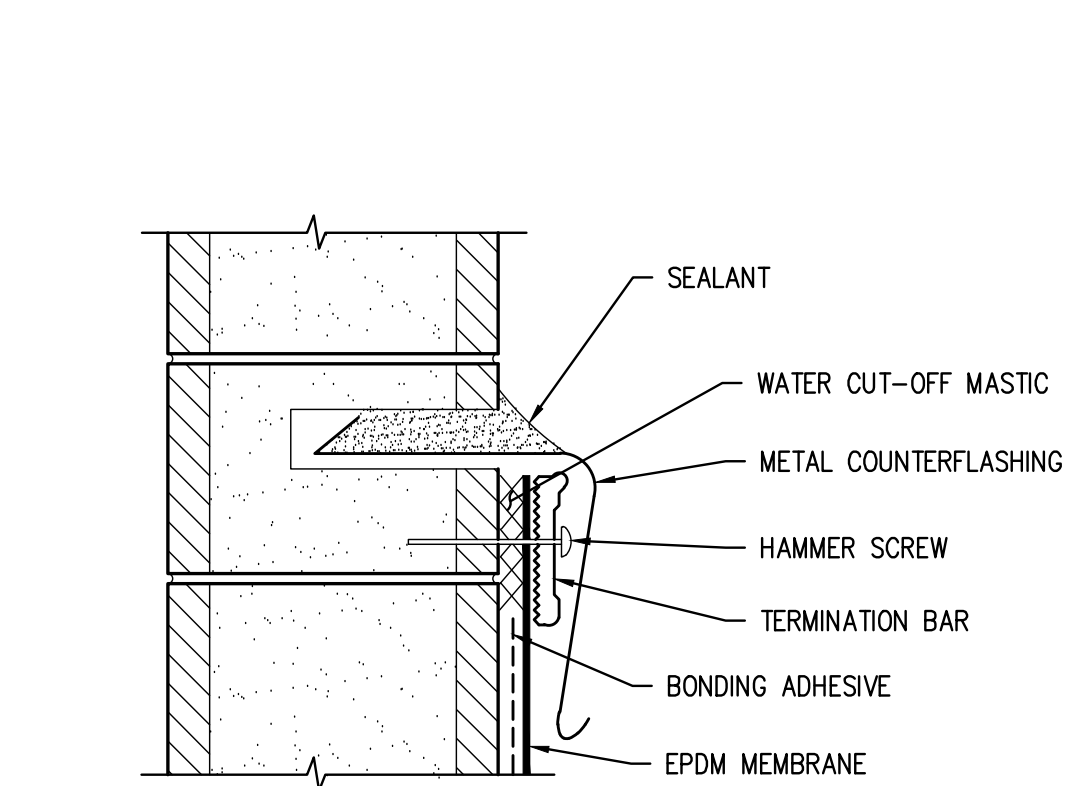
EXTERIOR DOOR HEAD DETAIL ②
NTS



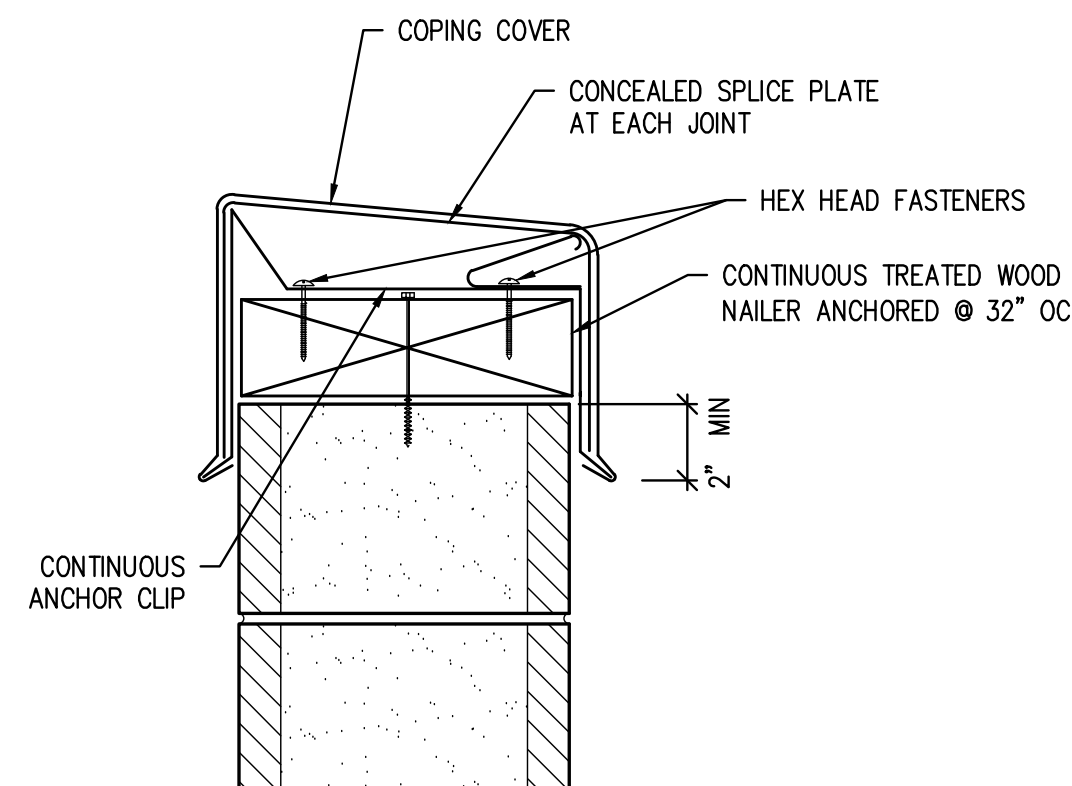
EXTERIOR DOOR JAMB DETAIL ③
NTS



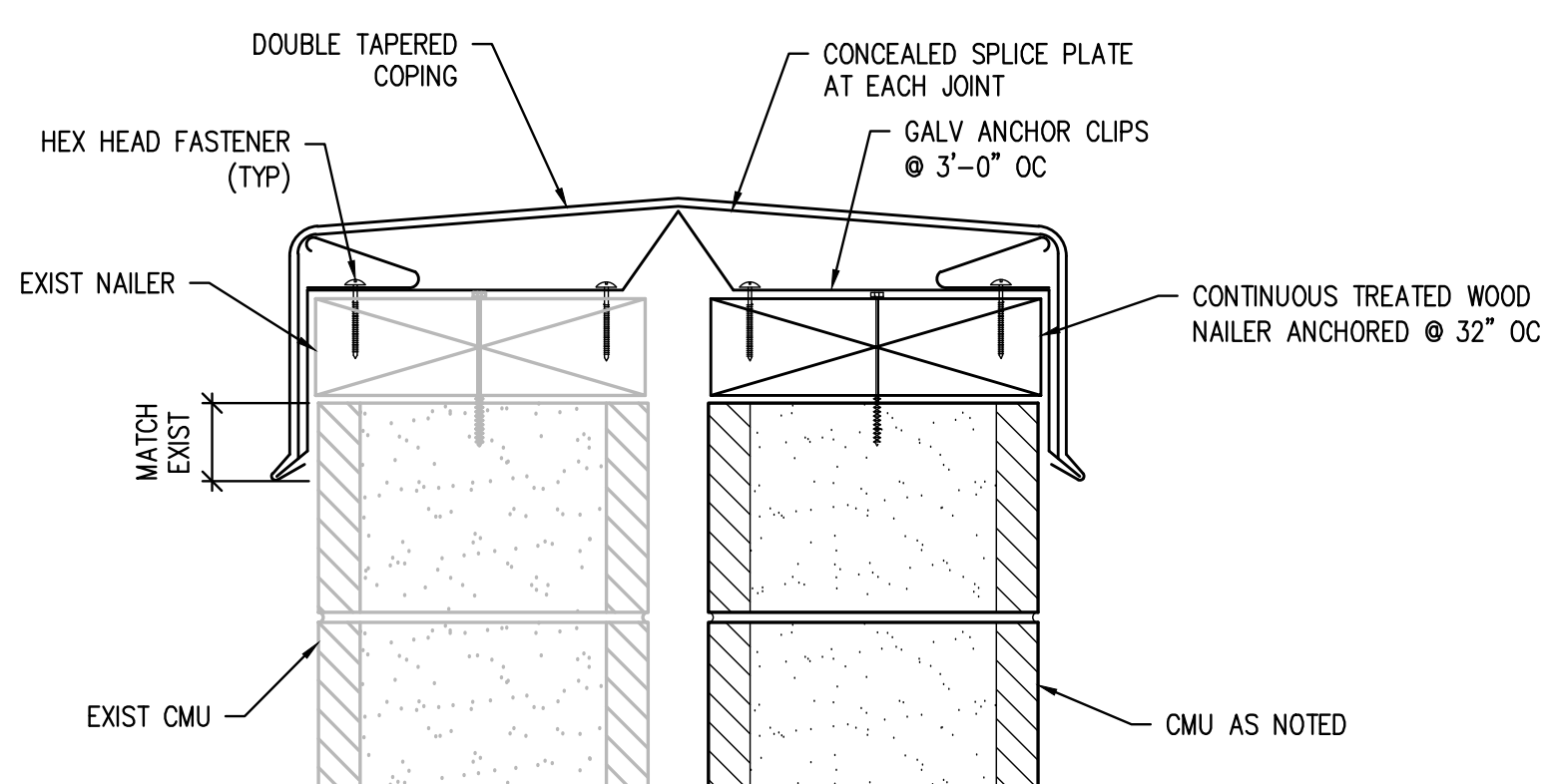
EXTERIOR DOOR SILL DETAIL ④
NTS



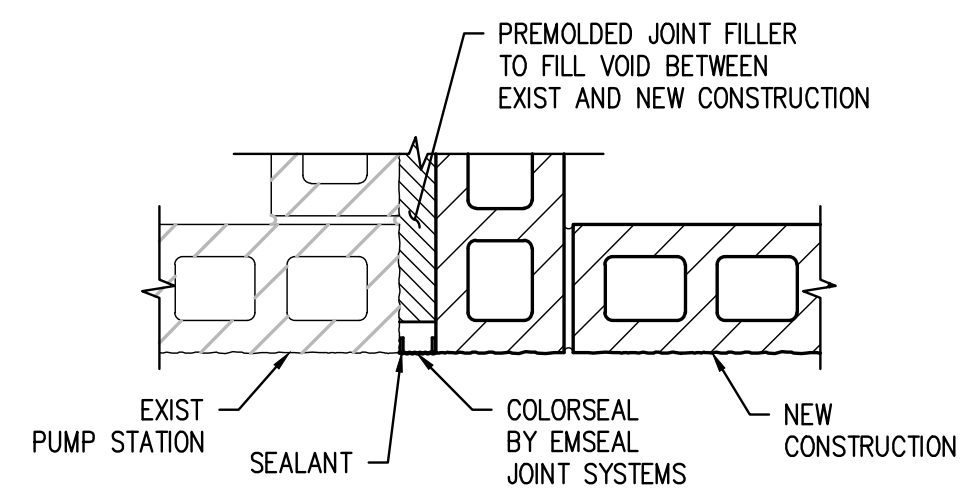
COUNTERFLASHING TERMINATION DETAIL ⑤
NTS



METAL COPING DETAIL ⑥
A1.0

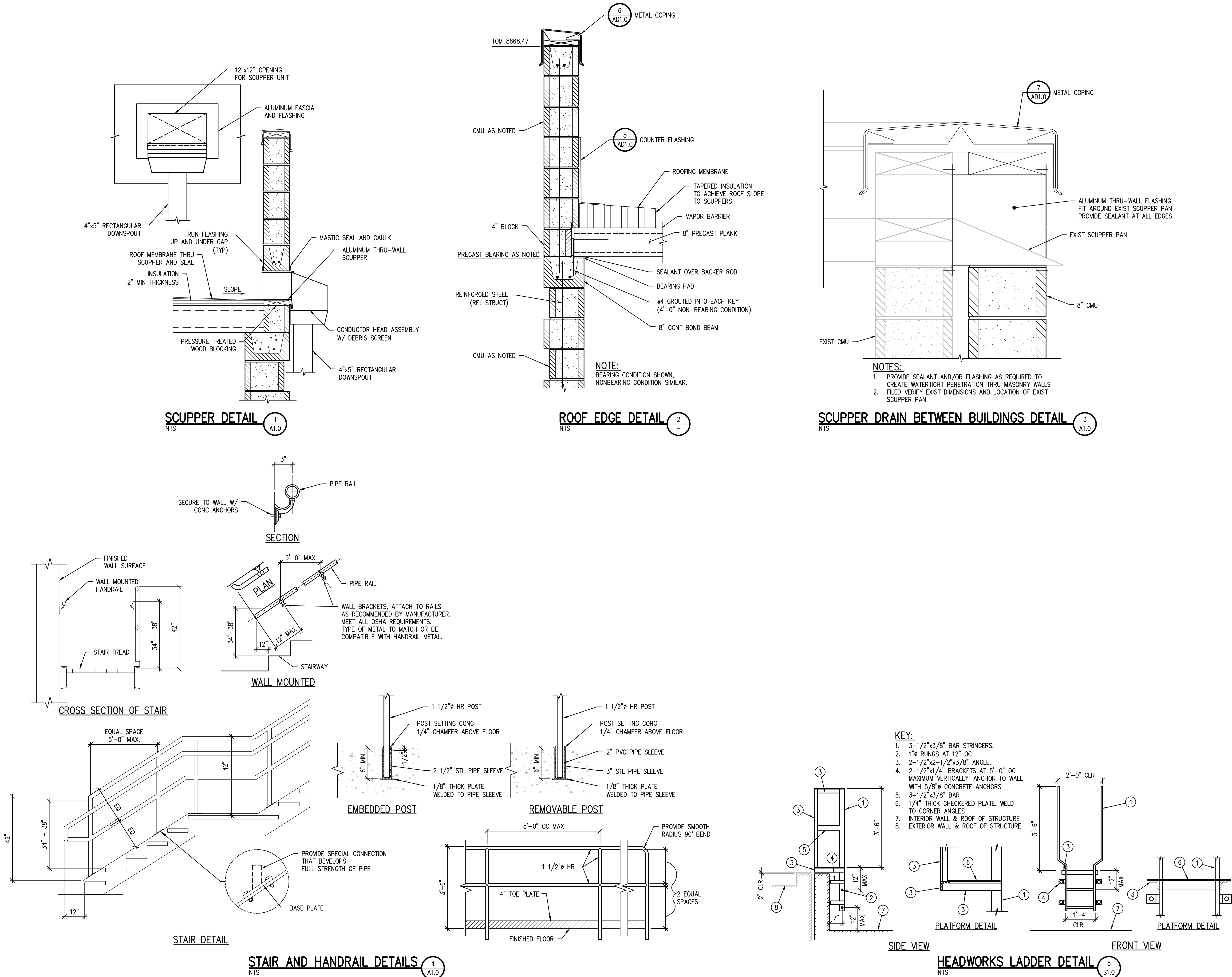


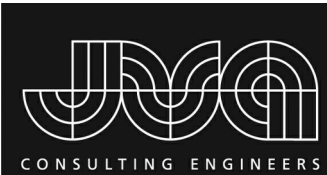
METAL COPING BETWEEN BUILDINGS DETAIL ⑦
A1.0



MASONRY JOINT DETAIL ⑧
A1.0

J:\2374c\Drawings\2374c - AD11.dwg, 4/15/2015 11:56:32 AM





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TELLURIDE WASTEWATER TREATMENT FACILITY
2015 RAW LIFT STATION IMPROVEMENT PROJECT
TOWN OF TELLURIDE, COLORADO

GENERAL STRUCTURAL NOTES

SHEET NO.

S0.1

REVISION DESCRIPTION

DWN

DES

DATE

NO.

DESIGNED BY: AJT

DRAWN BY: DJM

CHECKED BY: TSS

JOB #: 17358

DATE: APRIL 2015

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ABBREVIATIONS KEY

@	ON CENTER SPACING	DWG	DRAWING	LGS	LIGHT GAGE STEEL	REIN	REINFORCE, -ED, -ING
(E)	EXISTING	DWL	DOVEL	LL	LIVE LOAD	REQ	REQUIRED
(N)	NEW	EA	EACH	LLH	LONG LEG HORIZONTAL	REQMT	REQUIREMENT
(R)	REMOVE	ECC	ECCENTRIC	LLV	LONG LEG VERTICAL	RET	RETAINING
AB	ANCHOR ROD (BOLT)	E-E	END TO END	LOC	LOCATION	RM	ROOM
ADDL	ADDITIONAL	EF	EACH FACE	LP	LOW POINT	RMO	ROUGH MASONRY OPENING
ADJ	ADJUSTABLE	EJ	EXPANSION JOINT	LSL	LAMINATED STRAND LUMBER (GENERIC TERM)	RO	ROUGH OPENING
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	EL	ELEVATION	LT	LIGHT	SC	SLIP-CRITICAL
AFF	ABOVE FINISHED FLOOR	ELEC	ELECTRIC, ELECTRICAL	LVL	LAMINATED VENEER LUMBER (GENERIC TERM)	SCH	SCHEDULE
ALT	ALTERNATE	EMBED	EMBEDMENT	MACH	MACHINE	SOST	SELF-DRILLING/SELF-TAPPING
AMT	AMOUNT	ENGR	ENGINEER	MASY	MASONRY	SECT	SECTION
ANCH	ANCHOR, ANCHORAGE	EQ	EQUAL	MATL	MATERIAL	SF	SQUARE FEET, SUB-FLOOR
APPROX	APPROXIMATE	EQUIP	EQUIPMENT	MAX	MAXIMUM	SHT	SHEET
ARCH	ARCHITECT, -URAL	EQUIV	EQUIVALENT	MB	MACHINE BOLT	SHTG	SHEATHING
ATR	ALL THREAD ROD	ES	EACH SIDE	MECH	MECHANICAL	SM	SIMILAR
AVG	AVERAGE	EST	ESTIMATE	MEZZ	MEZZANINE	SLH	SHORT LEG HORIZONTAL
BC	BOTTOM OF CONCRETE	E-W	EAST TO WEST	MFR	MANUFACTURE, -ER, -ED	SLV	SHORT LEG VERTICAL
BL	BRICK LEDGE	EXC	EXCAVATE	MIN	MINIMUM	SOG	SLAB ON GRADE
BLK	BLOCK	EXP	EXPANSION	ML	MICROLLAM (TRUS-JOIST BRAND LVL)	SP	SPACES, SPACED
BLKG	BLOCKING	EXT	EXTERIOR	MO	MASONRY OPENING	SPEC	SPECIFICATIONS
BM	BEAM	FD	FLOOR DRAIN	MTL	METAL	SQ	SQUARE
BOT	BOTTOM	FDN	FOUNDATION	NF	NEAR FACE	ST	SMUG-TIGHT
BRG	BEARING	FF	FINISHED FLOOR, FAR FACE	NIC	NOT IN CONTRACT	STD	STANDARD
BW	BOTTOM OF WALL	F-F	FACE TO FACE	NS	NEAR SIDE	STIFF	STIFFENER
CB	COUNTERBOERE	FIG	FIGURE	N-S	NORTH TO SOUTH	STL	STEEL
CF	CUBIC FOOT	FL	FLUSH	NTS	NOT TO SCALE	STRUCT	STRUCTURE, -AL
CG	CENTER OF GRAVITY	FLG	FLANGE	OCJ	OSHA COLUMN JOIST	SUPT	SUPPORT
CIP	CAST-IN-PLACE	FLR	FLOOR	OD	OUTSIDE DIAMETER	SY	SQUARE YARD
CJ	CONSTRUCTION JOINT, CONTROL JOINT	FO	FACE OF	OH	OPPOSITE HAND	SYM	SYMMETRICAL
CJP	COMPLETE JOINT PENETRATION	FP	FULL PENETRATION	OPNG	OPENING	T&B	TOP AND BOTTOM
CL	CENTER LINE	FS	FOOT STEP, FAR SIDE	OPP	OPPOSITE	T&G	TONGUE AND GROOVE
CLG	CEILING	FTG	FOOTING	OSB	ORIENTED STRAND BOARD	TB	TOP OF BEAM
CLR	CLEAR	GA	GAGE, GAUGE	PAF	POWDER ACTUATED FASTENER	TC	TOP OF CONCRETE
CM	CONSTRUCTION MANAGER, -MENT	GALV	GALVANIZED	PC	PRECAST	TCA	TORQUE-CONTROLLED ANCHOR
CMU	CONCRETE MASONRY UNIT	GC	GENERAL CONTRACTOR	PCF	POUNDS PER CUBIC FOOT	TD	TOP OF DECK
COL	COLUMN	GEN	GENERAL	PE	PRE-ENGINEERED	THD	THREAD
COM	COMMON	GL	GLUED LAMINATED, GLU/LAM	PEN	PENETRATION	THK	THICK, -NESS
COMB	COMBINATION	GND	GROUND	PERP	PERPENDICULAR	TJ	TOP OF JOIST
CONC	CONCRETE	GR	GRADE	PJP	PARTIAL JOINT PENETRATION	TL	TOTAL LOAD
CONN	CONNECTION	GT	GIRDER TRUSS	PL	PLATE, PROPERTY LINE	TPG	TOPPING
CONT	CONTINUOUS, CONTINUE	GYP BD	GYPSUM BOARD	PLF	POUND PER LINEAR FOOT	TRANS	TRANSVERSE
COORD	COORDINATE, COORDINATION	HAS	HEADED ANCHOR STUD	PNL	PANEL	TW	TOP OF WALL
CS	COUNTERSINK	HDG	HOT-DIP GALVANIZED	PP	PANEL POINT	TYP	TYPICAL
CY	CENTER	HDR	HEADER	PS	PRESTRESSED	ULT	ULTIMATE
CTR	CUBIC YARD	HORIZ	HORIZONTAL	PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
DAB	DEFORMED ANCHOR BAR	HP	HIGH POINT	PSI	POUNDS PER SQUARE INCH	VERT	VERTICAL
DET	DETAIL	HT	HEIGHT	PSL	PARALLEL STRAND LUMBER (GENERIC TERM)	VIF	VERIFY IN FIELD
DEV	DEVELOP	ID	INSIDE DIAMETER	PT	POST TENSIONING, PRESSURE TREATED	WP	WORK POINT
DIAG	DIAGONAL	INT	INTERIOR, INTERMEDIATE	PTN	PARTITION	WT	WEIGHT
DIM	DIMENSION	IT	INVERTED TEE	PWD	PLYWOOD	WWF	WELDED WIRE FABRIC
DL	DEAD LOAD	JB	JOIST BEARING	QTY	QUANTITY	XS	EXTRA STRONG
DN	DOWN	JST	JOIST	R	RADIUS	XSECT	CROSS SECTION
DP	DRILLED PIER	JT	JOINT	RE	REFERENCE, REFER TO	XXS	DOUBLE EXTRA STRONG
DT	DOUBLE TEE	K	KIP (1,000 LBS)	RECT	RECTANGLE		

SYMBOLS KEY

	DIRECTION OF DECK SPAN
	GRID DESIGNATION
	CONTROL JOINT
	REVISION
	SHEAR WALL
	SHORING
	STEP IN FLOOR ELEVATION
	CMU (CONCRETE MASONRY UNIT)
	BRICK
	CIP CONCRETE
	PRECAST CONCRETE
	EXISTING CONCRETE
	PLATE TOPPED FIBERGLASS GRATING
	PUNCHED ALUMINUM GRATING
	EARTH

FIELD VERIFICATION:
• ALL DIMENSIONS AND CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR
• IF DIMENSIONS AND CONDITIONS DIFFER THAN THOSE SHOWN ON DRAWINGS, NOTIFY ARCHITECT AND ENGINEER
• NOTIFY ARCHITECT AND ENGINEER ONCE FINISHES ARE REMOVED & FOUNDATION IS EXCAVATED TO ALLOW OBSERVATION

STRUCTURAL DRAWING LIST

S0.1	GENERAL STRUCTURAL NOTES
S0.2	TYPICAL DETAILS & SECTIONS
S0.3	SECTIONS & DETAILS
S1.0	PLANS
S2.0	SECTIONS

STRUCTURAL GENERAL NOTES

DESIGN LOADS: 2006 International Building Code (IBC), except as noted

Occupancy Category	Importance Factor	Seismic
III Substantial Hazard	1.1w 1.1w 1.25	
Roofs:		
Flat Roof Snow Load	PF 75 psf	
Snow Exposure Factor	Ce 1.0	ASCE 7-05 Table 7-2
Thermal Factor	Ct 1.0	ASCE 7-05 Table 7-3

Floor Live Loads (Reference ASCE 7-05):	Uniformly Distributed (psf)
Occupancy or Use	150
Dumpster Storage Mezzanine	

Wind:	90 mph
Basic Wind Speed (3-second gust)	Internal Pressure Coefficient
Building Enclosure Classification	Ccpi=0.18
Enclosed	C
Wind Exposure	

Components & Cladding wind Pressures (psf):	
Wall Zone: See ASCE 7, Fig. 6-11A	
4&5 -15.2	
4 -15.2 internally	
5 -20.3 within 3 ft of corners	

Roof Zone: See ASCE7, Fig. 6-14A	Roof	Parapet
3 within 3 x 3 sq ft of corners	6.8	
3 within 3 x 3 sq ft of corners	-42.1	38.1
2 within 3 ft of edge	6.8	
2 within 3 ft of low edge	-27.9	38.1
1 internally	6.8	
1 internally	-16.	

Pressures noted are for 10 square ft Effective Wind Area and may be reduced for larger areas as allowed by code, but not below 10psf.

Seismic:	Acceleration	Coefficient
Spectral Response	Ss 0.413g	Sds 0.385g
Short Period	S1 0.093g	Sd1 0.124g
One Second		
Soils Site Class	D	
Seismic Design Category		
Basic Seismic-Force-Resisting System(s)	Intermediate Reinforced Masonry Shear Walls	
Design Base Shear	12 kips	
Seismic Response Coefficient(s)	Cs 0.14	
Response Modification Factor(s)	R 3.5	
Analysis Procedure	Equivalent Lateral Force	

FOOTINGS:
Design of footings is based on maximum allowable bearing pressure 1500 psf assumed
Bear on the natural undisturbed soil or compacted structural fill. Exterior footings shall bear below frost depth; minimum frost depth shall be 4'-0 below exterior grade.

REINFORCED CONCRETE:
Design is based on ACI 318-05 "Building Code Requirements for Reinforced Concrete." for Structural Concrete."
Structural concrete shall have the following properties:

Intended Use	f'c, psi	Max W/C	Maximum Aggregate (+/- 1")	Slump, inches	Entrained Air, percent	Cement	Admixtures,
All Locations	4,000	0.45	3/4" Stone	4	3	1/II	Comments

Detailing, fabrication, and placement of reinforcing steel shall be in accordance with ACI 318-05 "Details and Detailing of Concrete Reinforcement."
Reinforcing bars shall conform to ASTM A615-04a, Grade 60, except ties or bars shown to be field-bent, which shall be Grade 40.
Unless noted otherwise on the Structural Drawings, lap bars 50 diameters (minimum).
At corners and intersections, make horizontal bars continuous or provide matching corner bars for each layer of reinforcement.
Trim openings in walls and slabs with 2-#5 for each layer of reinforcement, fully developed by extension or hook.
In continuous members, splice top bars at mid-span and splice bottom bars over supports.
Form intermittent shear keys at all construction joints and as shown on the Structural Drawings.
Except as noted on the drawings, concrete protection for reinforcement in cast-in-place concrete shall be as follows:
Cast against and permanently exposed to earth: 3"
Exposed to earth or weather: 2"
#6 through #18 bars: 2"
#5 bar, w11 or D31 wire, and smaller: 1-1/2"
Not exposed to weather or in contact with ground: 3/4"
Slabs and walls: #11 bars and smaller
Beams and columns:
Primary reinforcement: 1-1/2"
Stirrups, ties, spirals: 1-1/2"

STRUCTURAL STEEL:
Structural steel shall be detailed, fabricated, and erected in accordance with the "Specification for Structural Steel Buildings" (AISC 360) and the "Code of Standard Practice for Steel Buildings and Bridges" (AISC 303) by the American Institute of Steel Construction (AISC).
Structural steel wide flange beams shall conform to ASTM A992-04a, 50 ksi yield. Other rolled shapes, including plates, channels, WTs, and angles shall conform to ASTM A36-04, 36 ksi yield.
Hollow structural section (HSS) rectangular shapes shall conform to ASTM A500-03a, Grade B, 46 ksi yield.
HSS round shapes shall conform to ASTM A500-03a, Grade B, 42 ksi yield.
Pipe shapes shall conform to ASTM A53-02, Grade B, 35 ksi yield.
Welding shall be done by a certified welder in accordance with the AISC documents listed above, the American Welding Society (AWS) D1.1: 2006 Structural Welding Code, and the recommendations for use of weld E70 electrodes. Where not specifically noted, minimum weld shall be 3/16" fillet by length of contact edge.
All post-installed anchors shall have current International Code Council Evaluation Service (ICC-ES) reports and shall be installed in accordance with the manufacturer's requirements.
Expansion anchors shall be approved "wedge" type unless specifically noted to be "sleeve" type as noted on the Structural Drawings.
Chemical anchors shall be approved epoxy or similar adhesive type as appropriate for installation in solid and non-solid base materials.

STRUCTURAL MASONRY:
Design is based on ACI 530-05/ASCE 5-05/TMS 402-05, "Building Code Requirements for Masonry Structures." Allowable stress design;
Compressive strength of masonry assembly used for design is 1500 psi, based on net-bedded area.
Except at masonry lintels using standard lintel units, bond beam units shall be produced from standard vertically voided units with pre-cut knockout cross walls.
Hollow load-bearing concrete masonry units (CMU) shall be lightweight, 85 to 105 pcf density, conforming to ASTM C90-03, with a minimum compressive strength of 1,900 psi based on average net area.
Mortar shall be Type S conforming to ASTM C270-04.
Masonry cement shall not be used unless part of a pre-packaged mortar or grout mix approved by the Structural Engineer.
Provide full shoved mortar in all head and bed joints.
Admixtures shall not be used unless approved by the Architect and Structural Engineer.
Grout used in masonry walls and block cells shall be coarse grout, as defined by ASTM C476-02, with a minimum cube strength = 2,000 psi or 3,000 psi concrete using 3/8" diameter aggregate and placed by vibrating unless an approved self-consolidating mix is used.
'Low-lift' grouting shall not exceed 5 feet in height unless ACI 530.1-05 'high-lift' grouting procedures are reviewed and approved by the Architect and Structural Engineer.
Vertically space continuous horizontal joint reinforcing at 16" maximum in all CMU walls. Joint reinforcing shall be welded type with 9 gage side rods and 9 gage trussed or ladder cross rods. Joint reinforcement shall be stainless steel or hot-dip galvanized.
Reinforcing bars shall be as for reinforced concrete except as noted. Unless otherwise noted on the Structural Drawings, lap bars 50 diameters (minimum) at splices.
Reinforcement shall be secured against displacement prior to grouting by wire bar locators or other suitable devices at intervals not exceeding 200 bar diameters or 10 feet.
Reinforce and grout vertical cells at corners, ends of walls, jambs of openings, each side of vertical control joints, and at spacing shown on drawings.
Where noted on the drawings, provide clearance between masonry and structural elements, or wrap steel with polyethylene film.
Locate vertical control joints in all masonry walls as shown on the Structural Drawings, or spaced horizontally at 25'-0 maximum spacing where not shown.

PRECAST/PRE-ENGINEERED CONCRETE:
The precast manufacturing plant shall be certified by the Precast/Prestressed Concrete Institute (PCI) Plant Certification Program. The manufacturer shall be certified at the time of bidding for all product groups and categories to be supplied.
Precast concrete members shall be designed by an engineer registered in the state of Colorado. Members shall be designed to support the full dead loads and superimposed design loads noted on the Structural Drawings. Live load reductions may be taken where permitted by the 2006 IBC.
Concrete used in precast members shall have a minimum 28-day compressive strength of 5,000 psi.
Shop drawings shall indicate all dimensions and all elements, including flexure and shear reinforcing, bearing plates and other embedded items. Calculations stamped and signed by the design engineer for all precast members shall accompany the shop drawings.
Erection drawings shall indicate all connecting elements and field welding.
Connections which are exposed to soil or weathering shall be protected from corrosion by a field-applied coating approved by the Architect.

SHOP DRAWINGS:
The Structural Drawings are copyrighted and shall not be copied for use as erection plans or shop details. Use of JVA's electronic files as the basis for shop drawings requires prior approval by JVA, a signed release of liability by the general contractor and/or his subcontractors, and deletion of JVA's name and logo from all sheets so used.
The general contractor shall submit in writing any requests to modify the Structural Drawings or Project Specifications.
All shop and erection drawings shall be checked and stamped (after having been checked) by the general contractor prior to submission for Structural Engineer's review; shop drawing submittals not checked by the general contractor prior to submission to the Structural Engineer will be returned without review.
Furnish two (2) prints of shop and erection drawings to the Structural Engineer for review prior to fabrication for concrete mix designs, reinforcing steel, structural steel, precast concrete.
Submit in a timely manner to permit 10 working days for review by the Structural Engineer.
Shop drawings submitted for review do not constitute "request for change in writing" unless specific suggested changes are clearly marked. In any event, changes made by means of the shop drawing submittal process become the responsibility of the one initiating the change.

FIELD VERIFICATION OF EXISTING CONDITIONS:
The general contractor shall thoroughly inspect and survey the existing structure to verify conditions that affect the work shown on the drawings.
The general contractor shall report any variations or discrepancies to the Architect and Structural Engineer before proceeding.

LETTERS OF CONSTRUCTION COMPLIANCE:
The general contractor shall determine from the local building authority, at the time the building permit is obtained, whether any letters of construction compliance will be requested from the Structural Engineer.
The contractor shall notify the Structural Engineer of all such requirements in writing prior to the start of construction.
Two day advance notice shall be given when requesting site visits necessary as the basis for the compliance letter.
The general contractor shall provide copies of all third-party testing and inspection reports to the Architect and Structural Engineer a minimum of one week prior to the date that the compliance letter is needed.

SPECIAL INSPECTIONS:
The following Special Inspections and Testing shall be performed by a qualified Special Inspector, retained by the Owner, in accordance with the following sections of IBC Chapter 17:

Section 1704 Special Inspections and the following sub-sections:
1704.4 Concrete Construction
1704.5 Masonry Construction, Level I Special Inspection
1704.7 Soils

The Special Inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection.

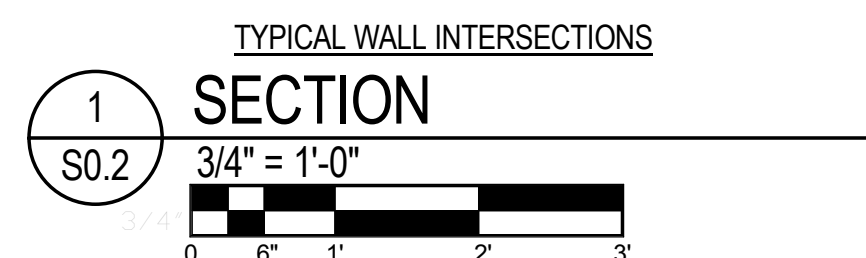
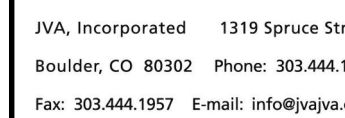
Duties and responsibilities of the Special Inspector shall be to inspect and/or test the work outlined above and within the Statement of Special Inspections in accordance with chapter 17 of the IBC for conformance with the approved construction documents. All discrepancies shall be brought to the immediate attention of the contractor for correction.

Per section 1704.1.2 the Special Inspector shall furnish regular reports to the building official and the Structural Engineer. Progress reports for continuous inspection shall be furnished weekly. Individual reports of periodic inspections shall be furnished within one week of inspection dates. The reports shall note uncorrected deficiencies, correction of previously reported deficiencies, and changes to the approved construction documents authorized by the Structural Engineer of Record.

The Special Inspector shall submit a final signed report within 10 days of the final special inspection stating whether the work requiring special inspection was, to the best of the Inspector's knowledge, in conformance with the approved construction documents and the applicable workmanship provisions of the IBC. Work not in compliance shall be noted in the report.

The contractor shall submit a statement of responsibility to the Building Official and the Owner prior to the commencement of work on a main wind- or seismic-force-resisting system, designated seismic system or a wind- or seismic-resisting component listed in the Statement of Special Inspections per section 1706.

Except as noted, the special inspections outlined above are in addition to, and beyond the scope of, periodic structural observations as defined in section 1709. Structural observations are included in the structural engineering design and construction administration services provided by the Structural Engineer.



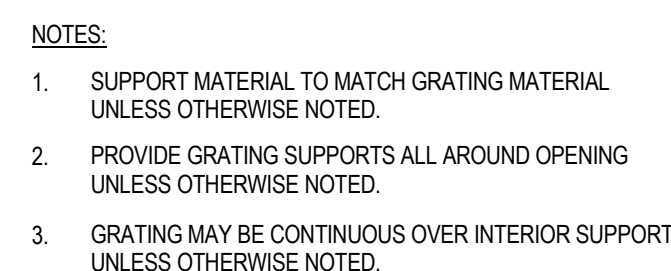
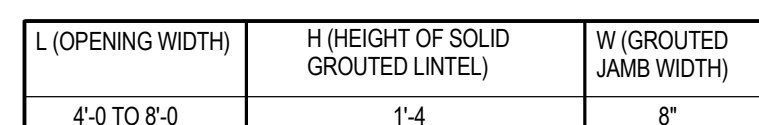
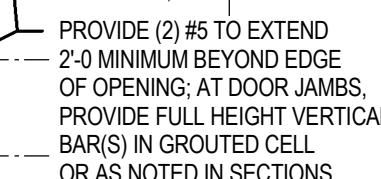
LAP LENGTHS GIVEN ARE FOR BARS IN CONCRETE



1. VERTICAL REINFORCING INSTALLED FULL HEIGHT IN SOLID GROUTED VERTICAL CELLS AT SPACING SHOWN AND LOCATED AT OPENING JAMBS, VERTICAL CONTROL JOINTS, WALL ENDS, CORNERS, AND INTERSECTIONS
2. STANDARD LADDER-TYPE CONTINUOUS HORIZONTAL JOINT REINFORCING VERTICALLY @ 16" UNLESS OTHERWISE NOTED
3. ADD BOND BEAMS AS NOTED IN SECTIONS, AT PRECAST BEARING ELEVATION AND AT ALL TOP OF WALL LOCATIONS

Diagram illustrating the reinforcement details for a square opening in a wall. The opening is defined by dimensions L (length) and W (width). The reinforcement includes:

- Top and bottom reinforcement bars with a minimum length of $2 \times \text{MIN}$ (2 times the minimum bar length).
- Side reinforcement bars with a minimum length of $2 \times \text{MIN}$ (2 times the minimum bar length).
- A 4" CLR (4 inch clearance) is indicated for the reinforcement bars.
- The reinforcement is provided as (2) #5 bars, with a minimum length of 2'-0" (2 feet) for the opening.
- The reinforcement is provided as full bars in the ground or as noted.



DESIGNED BY:	AJT
DRAWN BY:	DJM
CHECKED BY:	TSS
JOB #:	17358
DATE:	APRIL 2015
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TELLURIDE WASTEWATER TREATMENT FACILITY
2015 RAW LIFT STATION IMPROVEMENT PROJECT
TOWN OF TELLURIDE, COLORADO

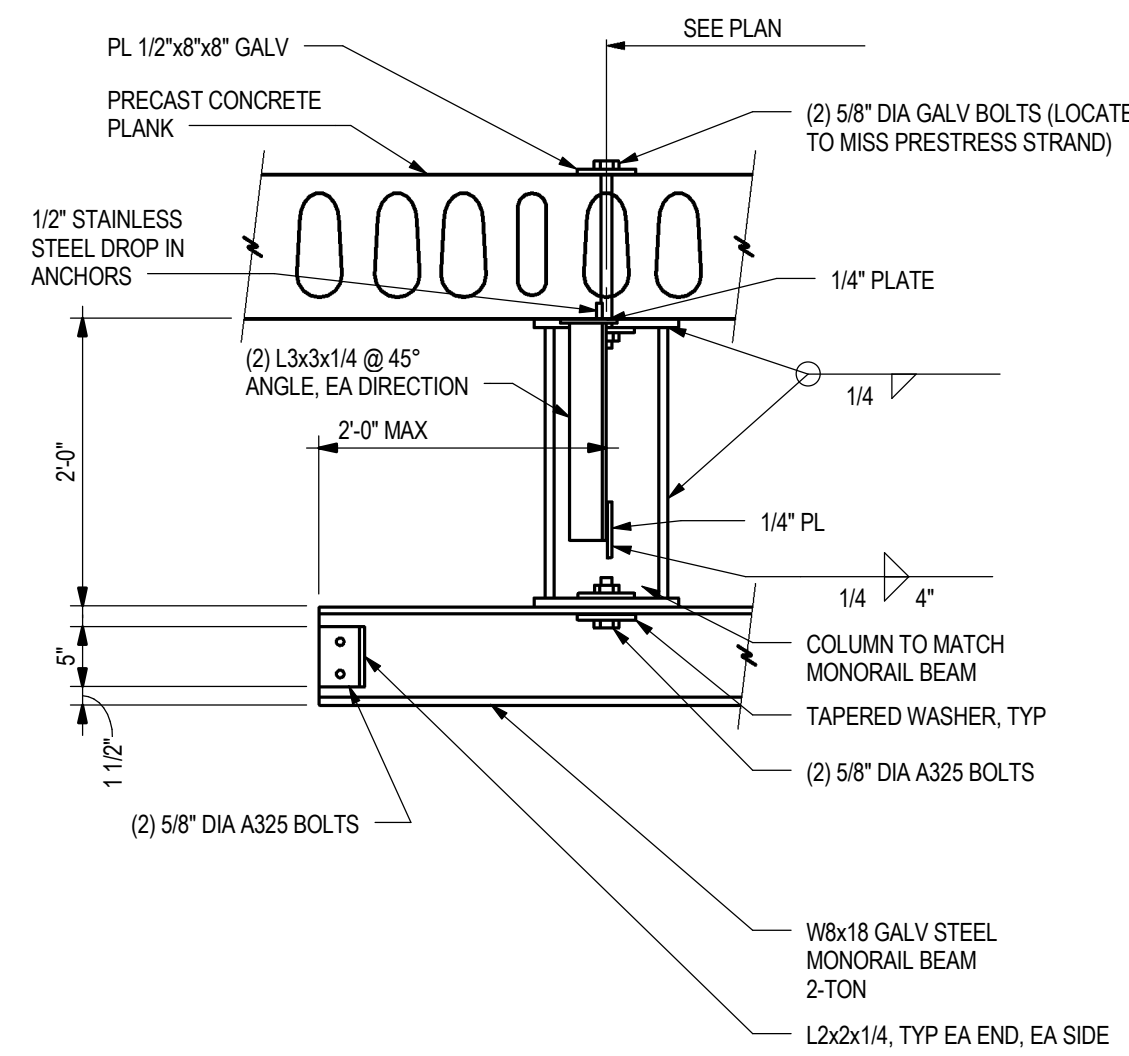
TYPICAL DETAILS & SECTIONS

SHEET NO.

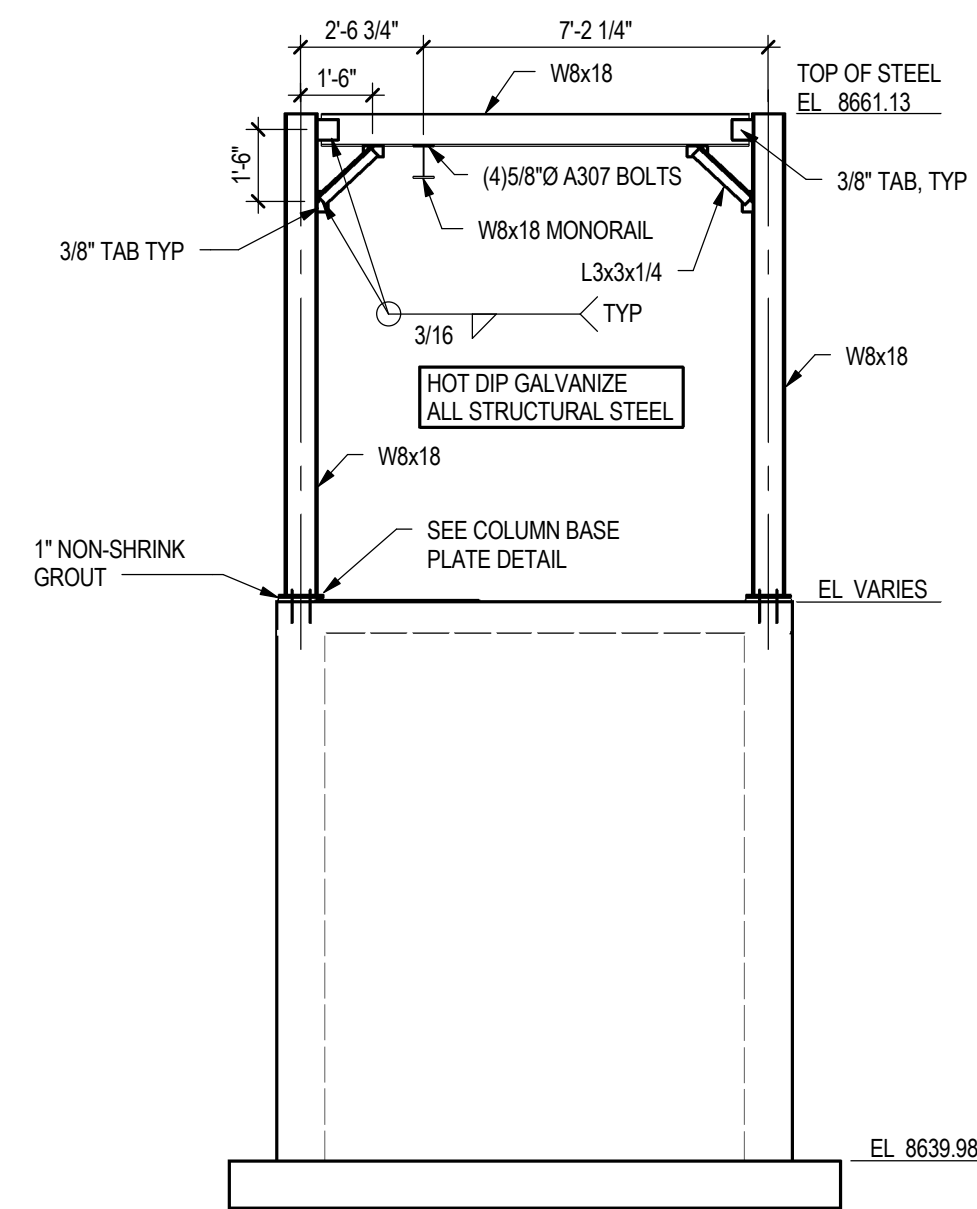
S0.2



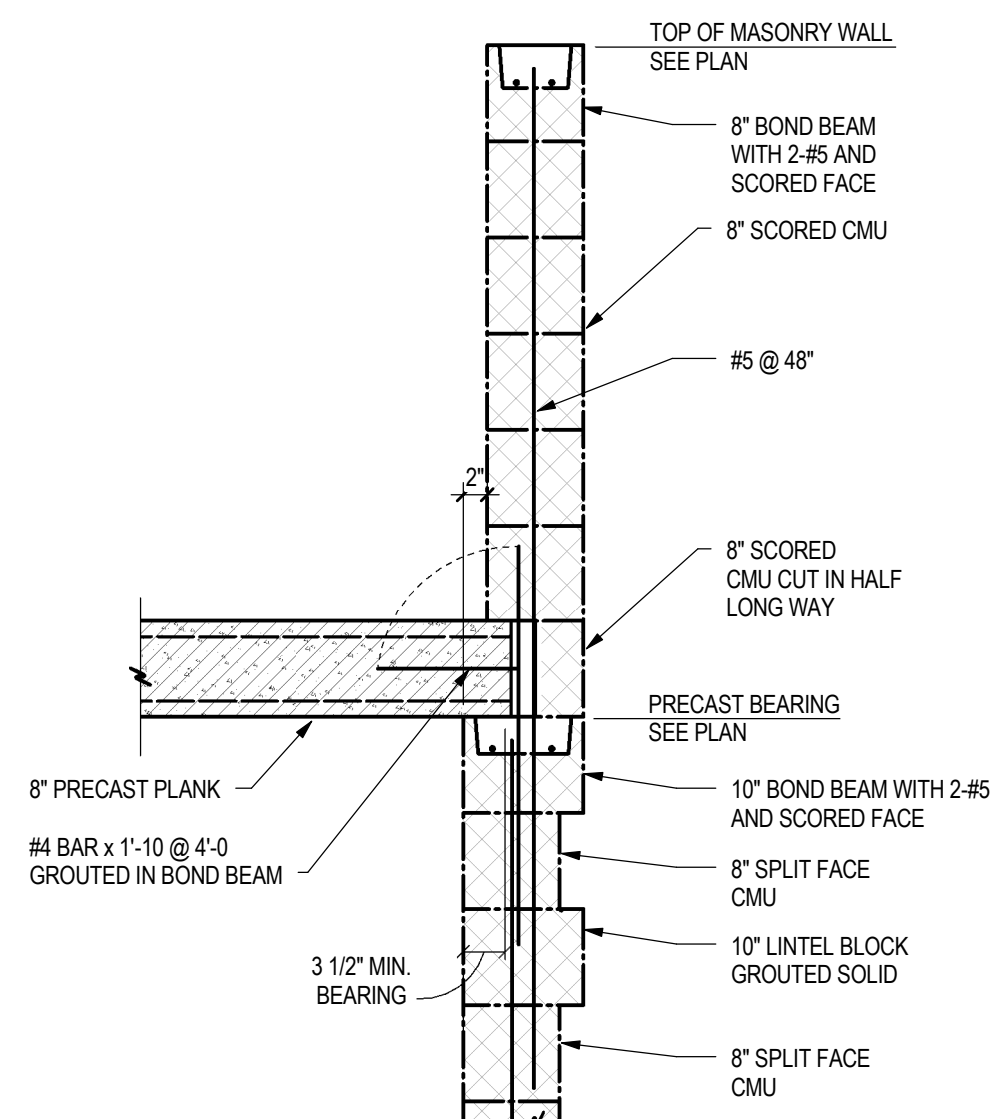
JVA, Incorporated 1319 Spruce Street
Boulder, CO 80302 Phone: 303.444.1951
Fax: 303.444.1957 E-mail: info@jvaja.com



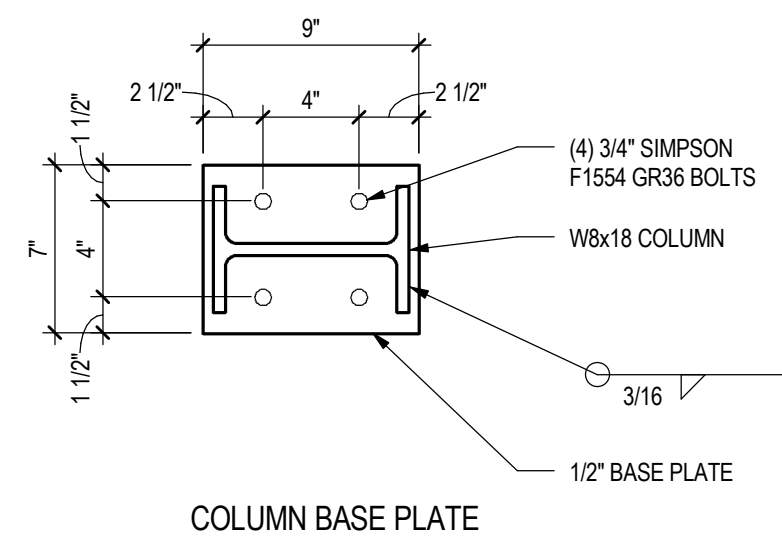
1 SECTION
S0.3 3/4" = 1'-0"



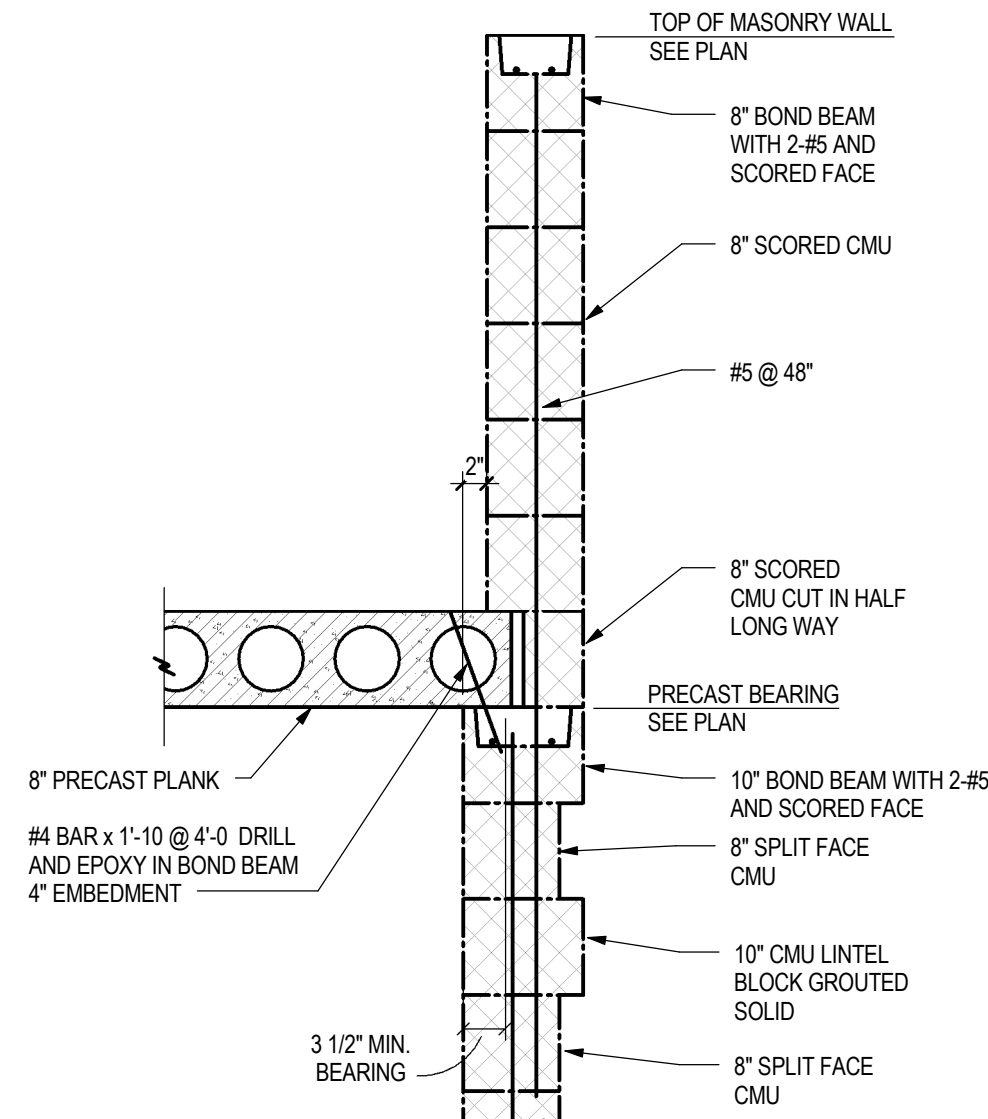
4 SECTION
S0.3 1/4" = 1'-0"



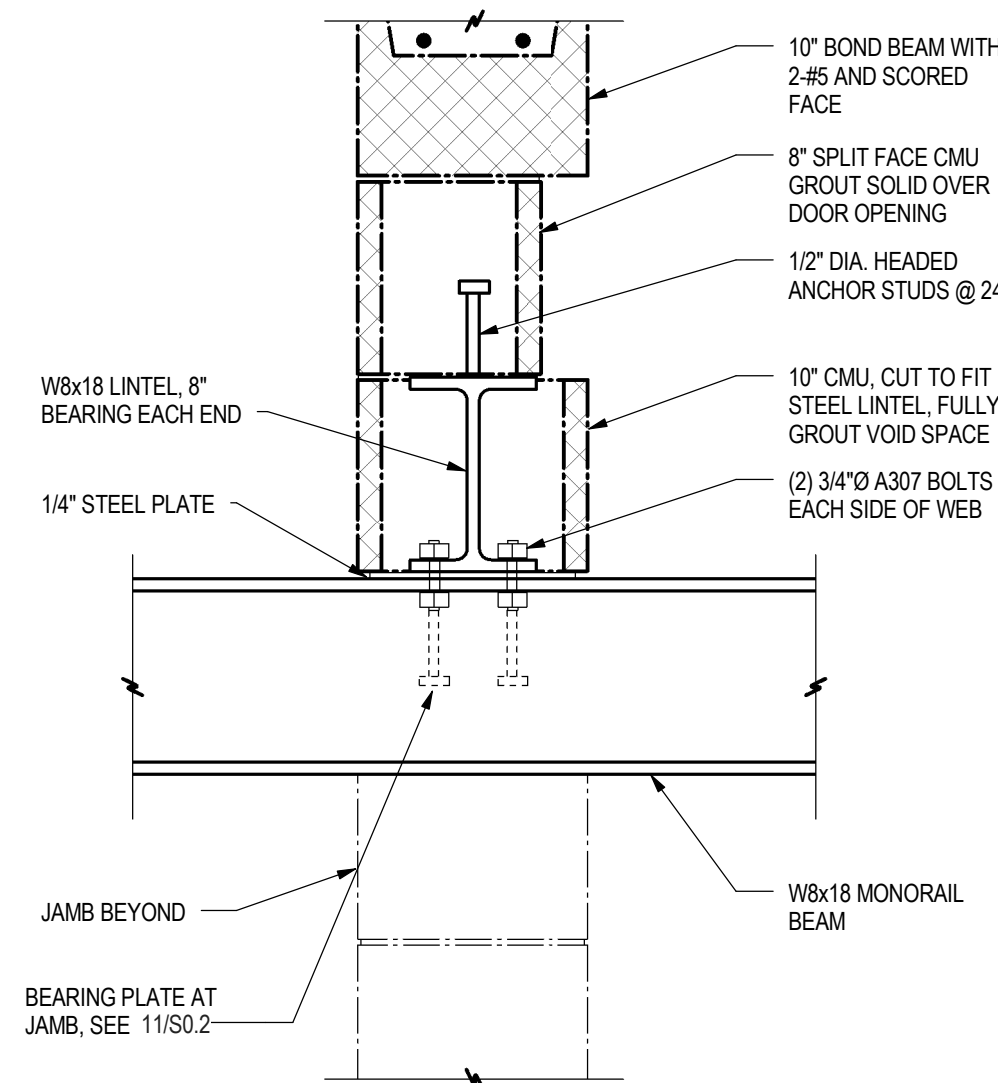
2 SECTION
S0.3 3/4" = 1'-0"



5 DETAIL
S0.3 1 1/2" = 1'-0"



3 SECTION
S0.3 3/4" = 1'-0"



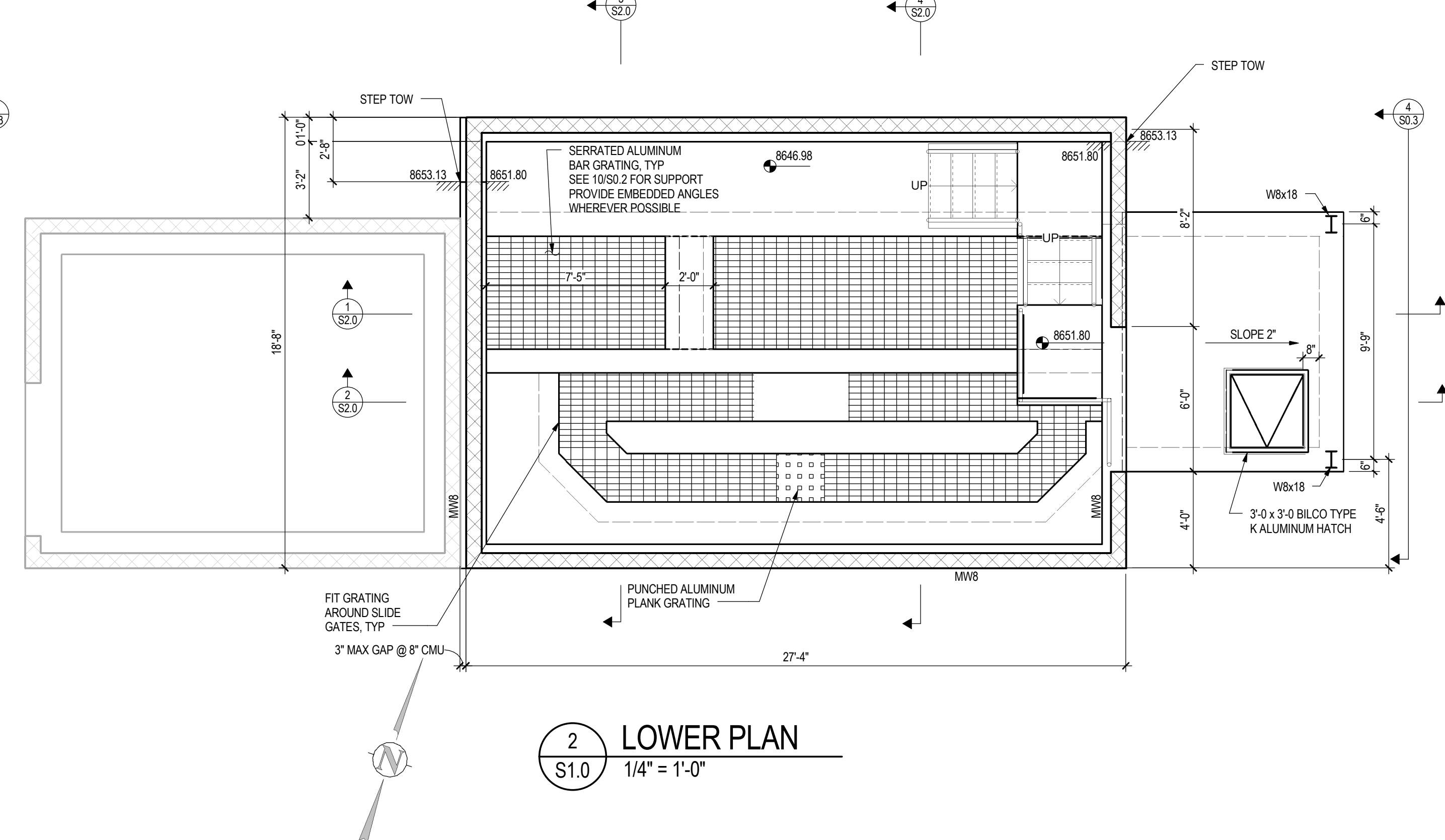
6 DETAIL
S0.3 1 1/2" = 1'-0"

TELLURIDE WASTEWATER TREATMENT FACILITY
2015 RAW LIFT STATION IMPROVEMENT PROJECT
TOWN OF TELLURIDE, COLORADO

SECTIONS & DETAILS

SHEET NO.

S0.3

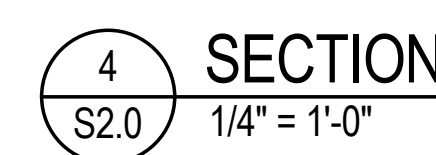
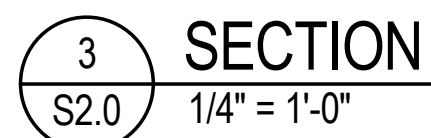
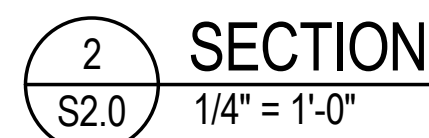
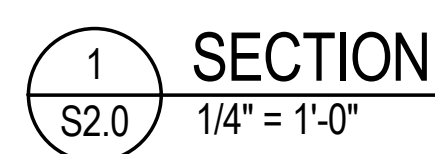
[illegible]

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DRAWN BY:	DJM
CHECKED BY:	TSS
JOB #:	17358
DATE:	APRIL 2015
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TELLURIDE WASTEWATER TREATMENT FACILITY 2015 RAW LIFT STATION IMPROVEMENT PROJECT TOWN OF TELLURIDE, COLORADO

HEET NO.

S1.0



DESCRIPTION

NO	DATE	RECD	NAME
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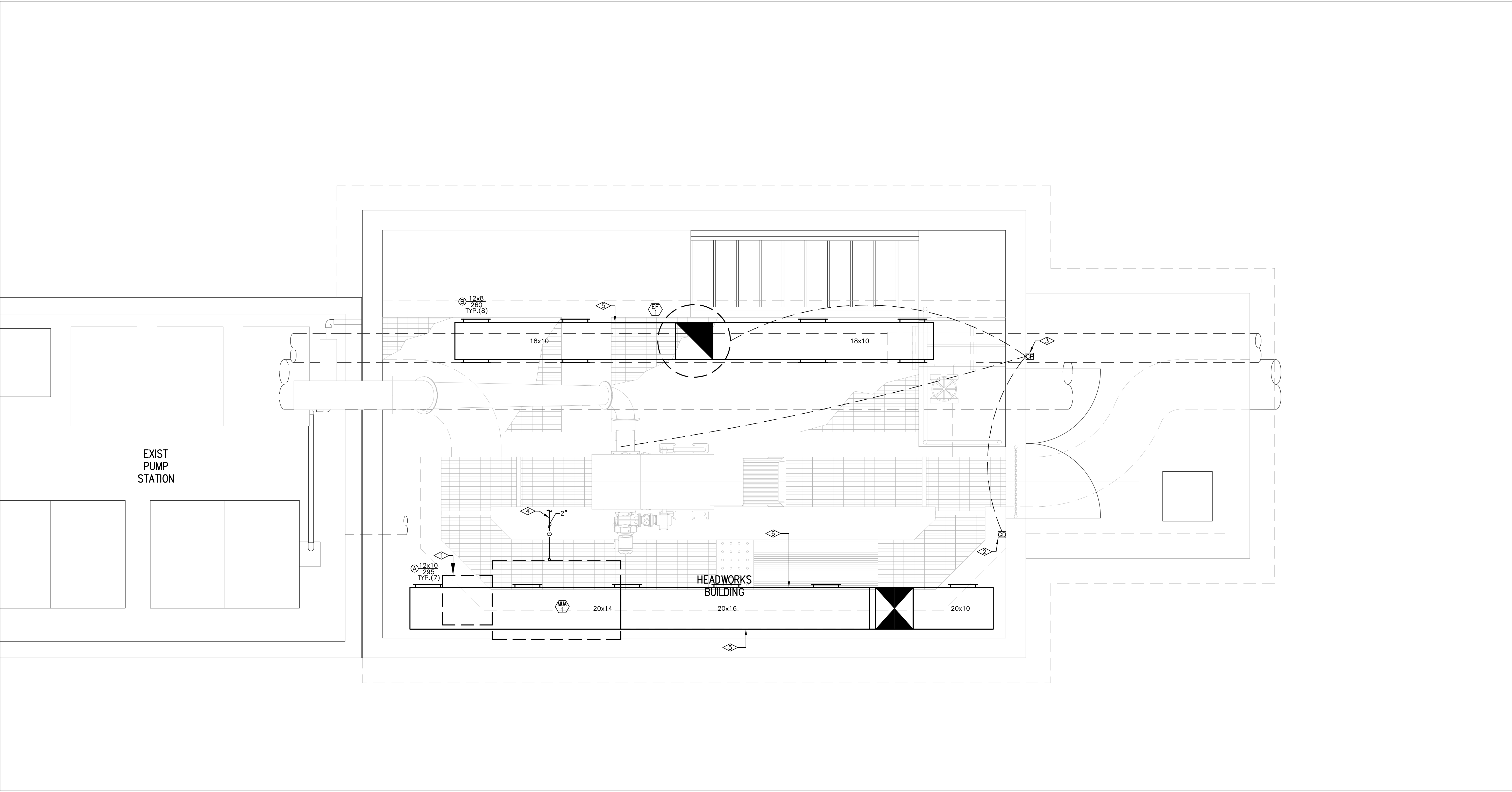
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JOB #:	17358
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TELLURIDE WASTEWATER TREATMENT FACILITY

2015 RAW LIFT STATION IMPROVEMENT PROJECT

TOWN OF TELLURIDE, COLORADO

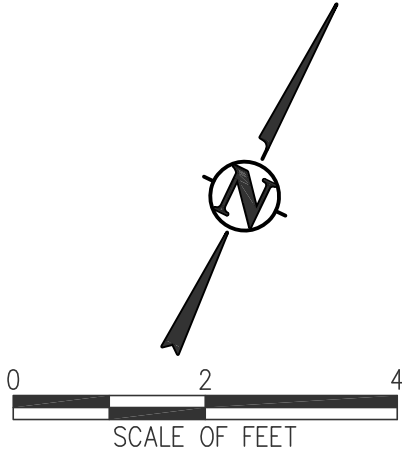
SECTIONS



HEADWORKS BUILDING MECHANICAL PLAN
1/2" = 1'-0"

- FLAG NOTES:
1. PROVIDE AND INSTALL NEW GAS FIRED MAKE-UP AIR UNIT ON THE ROOF AT THIS LOCATION. ROUTE SUPPLY DUCTWORK FROM THE CONNECTION AT THE UNIT, ON THE ROOF A MINIMUM OF 10 FEET HORIZONTALLY, AND DOWN THROUGH THE ROOF. PROVIDE INSULATION AND WEATHER PROOF ALUMINUM JACKET ON ROOF MOUNTED EXTERIOR DUCTWORK. MAINTAIN A MINIMUM OF 10 FEET BETWEEN THE EXHAUST FAN DISCHARGE AND THE MAKE-UP AIR UNIT INTAKE.
 2. PROVIDE AND INSTALL MACURCO GT-11A GAS DETECTOR/TRANSDUCER AT THIS LOCATION 12" ABOVE FINISHED FLOOR. THE DETECTOR SHALL BE INTERLOCKED WITH THE CONTROL PANEL.
 3. PROVIDE AND INSTALL MACURCO DVP-120 DETECTION AND VENTILATION CONTROL PANEL MOUNTED IN A NEMA 4X STAINLESS STEEL ENCLOSURE. THE GAS DETECTORS SHALL BE INTERLOCKED WITH THE CONTROL PANEL. UPON DETECTION OF METHANE OVER THE SETPOINT (ADJUSTABLE) THE PANEL SHALL ALARM AND ENERGIZE THE MAKE-UP AIR UNIT AS WELL AS THE EXHAUST FAN TO THE 12 AC/HR LEVEL. THE SYSTEM SHALL ALSO BE CAPABLE OF OPERATING AT 6 AC/HR DURING NORMAL OPERATION.
 4. ROUTE 2" GAS LINE FROM THE NEAREST EXISTING NATURAL GAS LINE OF ADEQUATE CAPACITY, UP THROUGH THE ROOF, AND CONNECT TO THE NEW GAS FIRED MAKE-UP AIR UNIT.
 5. ALL SUPPLY AND EXHAUST DUCTWORK SHALL BE ALUMINUM, TYPICAL.
 6. ROUTE A MINIMUM OF 10 FEET OF 20"x16" DUCTWORK ON THE ROOF PRIOR TO DROPPING DOWN INTO THE CLASSIFIED SPACE.

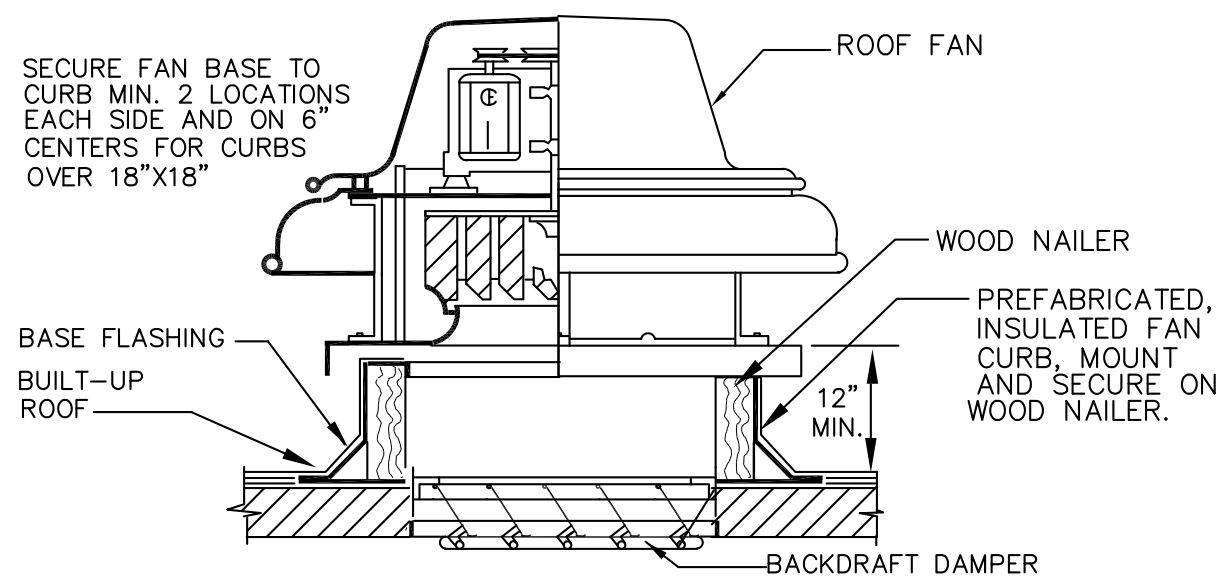
- GENERAL NOTE:
1. ALL INTERIOR DUCTWORK SHALL BE INSULATED WITH 1-1/2" FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING. ALL EXTERIOR DUCTWORK SHALL BE INSULATED WITH 2" FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING AND SHALL BE WRAPPED WITH A 26 GAUGE ALUMINUM WEATHERPROOF JACKET.
 2. ALL DUCTWORK SHALL BE ALUMINUM.



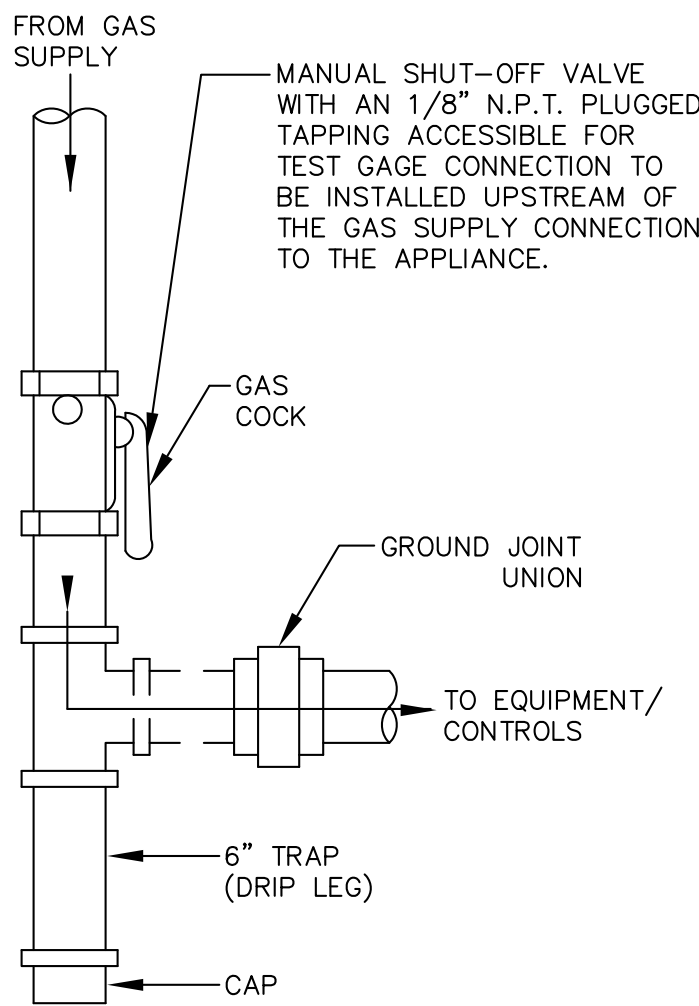
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Bighorn Consulting Engineers, Inc.
Mechanical & Electrical Engineers
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Grand Junction, CO 81505
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fax: 970-241-9514

TELLURIDE WASTEWATER TREATMENT FACILITY IMPROVEMENTS TELLURIDE, COLORADO	HEADWORKS BUILDING MECHANICAL PLAN	SHEET NO. M1.0	NO.	DATE	DESIGN	DRAWN	REVISION DESCRIPTION
			4/16/15				
			BID SET				
			DESIGNED BY: MJH				
			DRAWN BY: MJH				
			CHECKED BY: BHE				
			JOB #: 2374c				
			DATE: 01 APRIL 2015				
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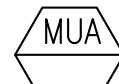


ROOF FAN MOUNTING DETAIL
NOT TO SCALE



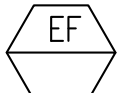
GAS CONNECTION TO EQUIPMENT DETAIL
NOT TO SCALE

OUTDOOR DIRECT FIRED MAKE-UP AIR UNIT SCHEDULE



EQUIPMENT NO.	SERVICE	SUPPLY AIR (CFM)	EXTERNAL STATIC PRESS. (IN. W.G.)	INPUT (BTU)	OUTPUT (BTU)	EFFIC- IENCY A.F.U.E.	GAS RATE (CFH)	ELECTRIC		MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
								HP	VOLT.-PH.-CY.		
MUA-1	HEADWORKS	2,055/1,030	0.75	400,000	204,800	92	470.6	2.0	480-3-60	TITAN - TA-109 NG HRH	NOTE - 1
NOTES: PROVIDE WITH THE FOLLOWING: <ul style="list-style-type: none">FRESH AIR INTAKE HOOD WITH BIRDSCREEN - TYPE: 45 DEGREEHORIZONTAL SIDE SUPPLY AIR DISCHARGEOUTSIDE AIR FILTER SECTION - TYPE: 2" CLEANABLEDISCHARGE DAMPER AND ACTUATORLAU A12-12A BLOWERINTERNAL AND EXTERNAL HERESITE UNIT AND ACCESSORY COATINGEPOXY COATED DAMPER WITH GALVANIZED HARDWAREINTERIOR UNIT LINERINSULATED UNITCASING AND ACCESSORIES PAINTED STANDARD COLOR1750 RPM TEFC PREMIUM EFFICIENCY MOTORLOW TEMPERATURE SAFETYINLET DUCT/STAT (WARM OA BURNER SHUTDOWN)OPERATING LIGHTS ON REMOTE PANELCLOGGED FILTER SWITCH AND LIGHTCIRCUIT ANALYZER IN UNITS VESTIBULELOW FIRE STARTHIGH GAS PRESSURE SWITCHEXHAUST FAN INTERLOCK9000' ELEVATIONEXTERNAL GFCI OULET, 120V/160 BY ELECTRICAL CONTRACTOR100% OA OR 50% OAEXPLOSION PROOF TWO SPEED AMU JCI FX-10 / MUI DISCHARGE CONTROL (ROOM OVERRIDE SELECTABLE) & ECLIPSE BUTTERFLY VALVE - BELIMO ACTUATORDOOR INTERLOCKED NON-FUSED UNIT DISCONNECTINTERRUPTED IGNITIONETL LABEL (ANSI Z83.4/CSA 3.7)APPROXIMATE OPERATING WEIGHT - 1,000 LBS. INCLUDING ROOF CURB.											

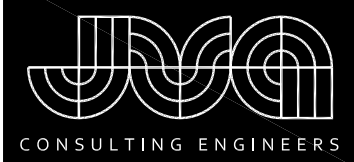
FAN SCHEDULE



EQUIPMENT NO.	SERVICE	LOCATION	CFM	STATIC PRESS. (IN. W.G.)	MOTOR				MANUFACTURER & MODEL	ALTITUDE (FEET)	OPTIONS-ACCESSORIES
					WATTS	HP	RPM	VOLT.-PH.-CY.			
EF-1	HEADWORKS	ROOF	2,055	0.75	-	1-1/2	1725	480-3-60	COOK - 150 FCRUB	9,000	NOTES - 1 & 2
NOTES: 1. PROVIDE WITH PRE-WIRED UNFUSED EXPLOSION PROOF DISCONNECT, AUTOMATIC BELT TENSIONER, FRP HOUSING, FRP BACKWARD INCLINED WHEEL, FRP ROOF CURB, FRP BACKDRAFT DAMPER, STAINLESS STEEL BIRDSCREEN, CORROSION RESISTANT FASTENERS, STAINLESS STEEL SHAFT, AND (1) SET SPARE BELTS. ALL FAN COMPONENTS THAT COME IN CONTACT WITH THE AIRSTREAM SHALL BE FRP CORROSION RESISTANT. 2. PROVIDE WITH EXPLOSION PROOF TWO-SPEED STARTER SO THE FAN OPERATES AS A TWO SPEED FAN AT 2,055 CFM AND 1,030 CFM. FAN SHALL BE INTERLOCKED WITH THE OPERATION OF THE MAKE-UP AIR UNIT AS WELL AS THE GAS DETECTION SYSTEM.											

GRILLE - REGISTER - DIFFUSER SCHEDULE

EQUIPMENT NO.	SIZE	TYPE	MANUFACTURER & MODEL	FINISH	OPTIONS-ACCESSORIES
A	AS NOTED ON DWGS	SUPPLY REGISTER	KRUEGER 5880	STANDARD WHITE	ALL ALUMINUM, DOUBLE DEFLECTION, AND OPPOSED BLADE DAMPER
B	AS NOTED ON DWGS	EXHAUST GRILLE	KRUEGER EGC10	STANDARD WHITE	ALL ALUMINUM AND OPPOSED BLADE DAMPER
NOTES:					



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BID SET
REVISION DESCRIPTION
4/16/15
NO.
DATE
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DWN

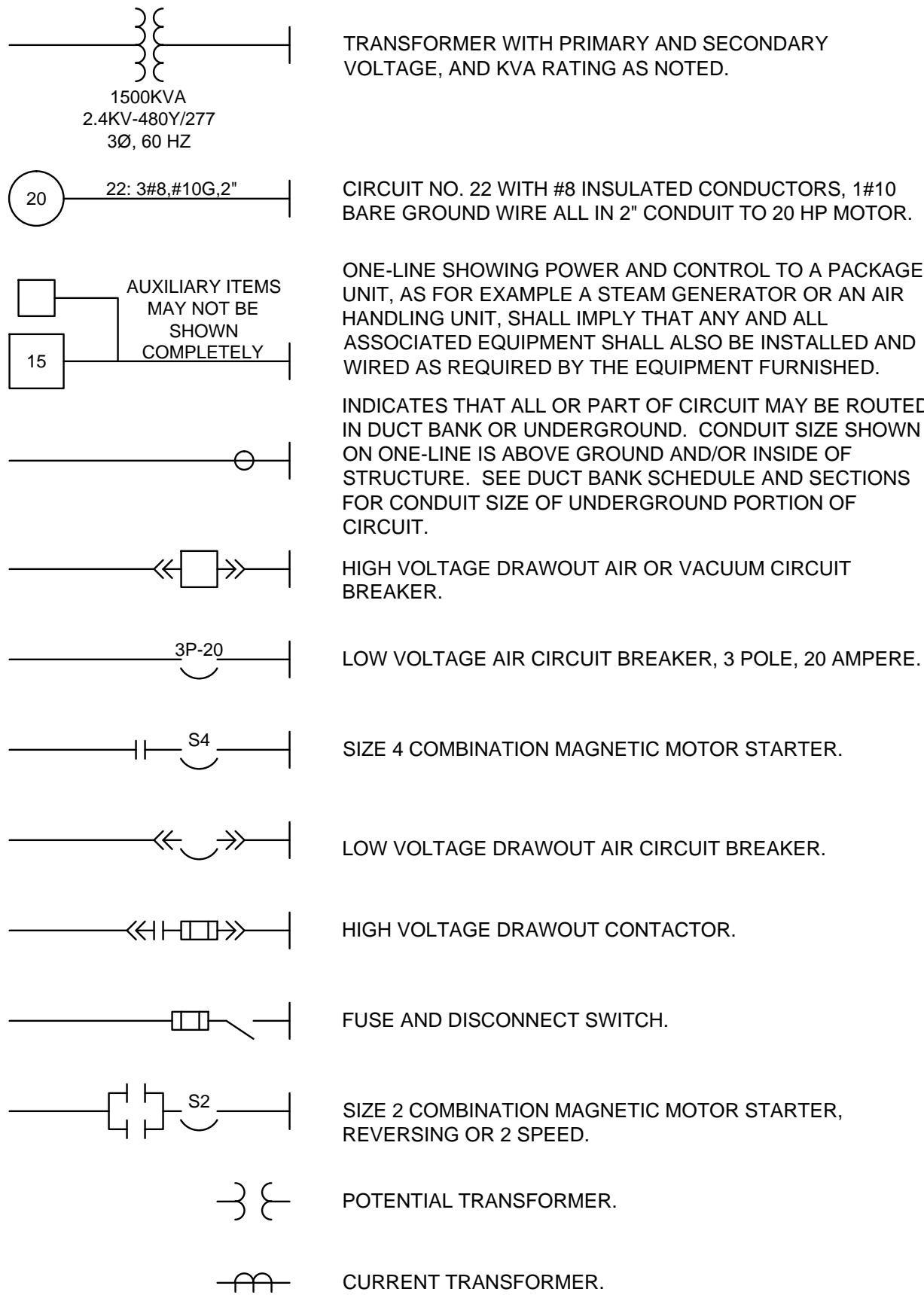
DESIGNED BY: MJH
DRAWN BY: MJH
CHECKED BY: BHE
JOB #: 2374c
DATE: 01 APRIL 2015
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TELLURIDE WASTEWATER TREATMENT FACILITY
IMPROVEMENTS
TELLURIDE, COLORADO
HEADWORKS BUILDING
MECHANICAL NOTES AND DETAILS

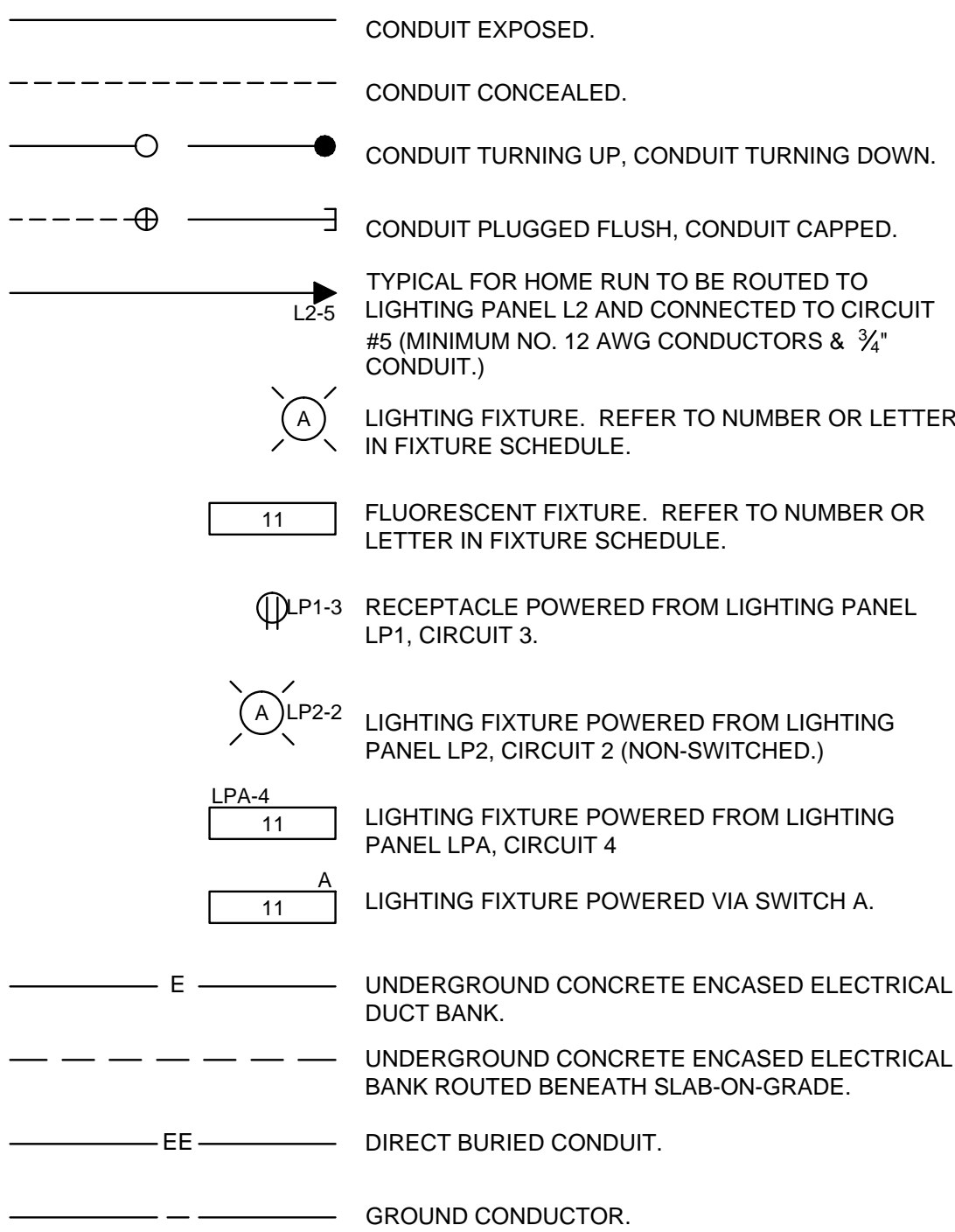
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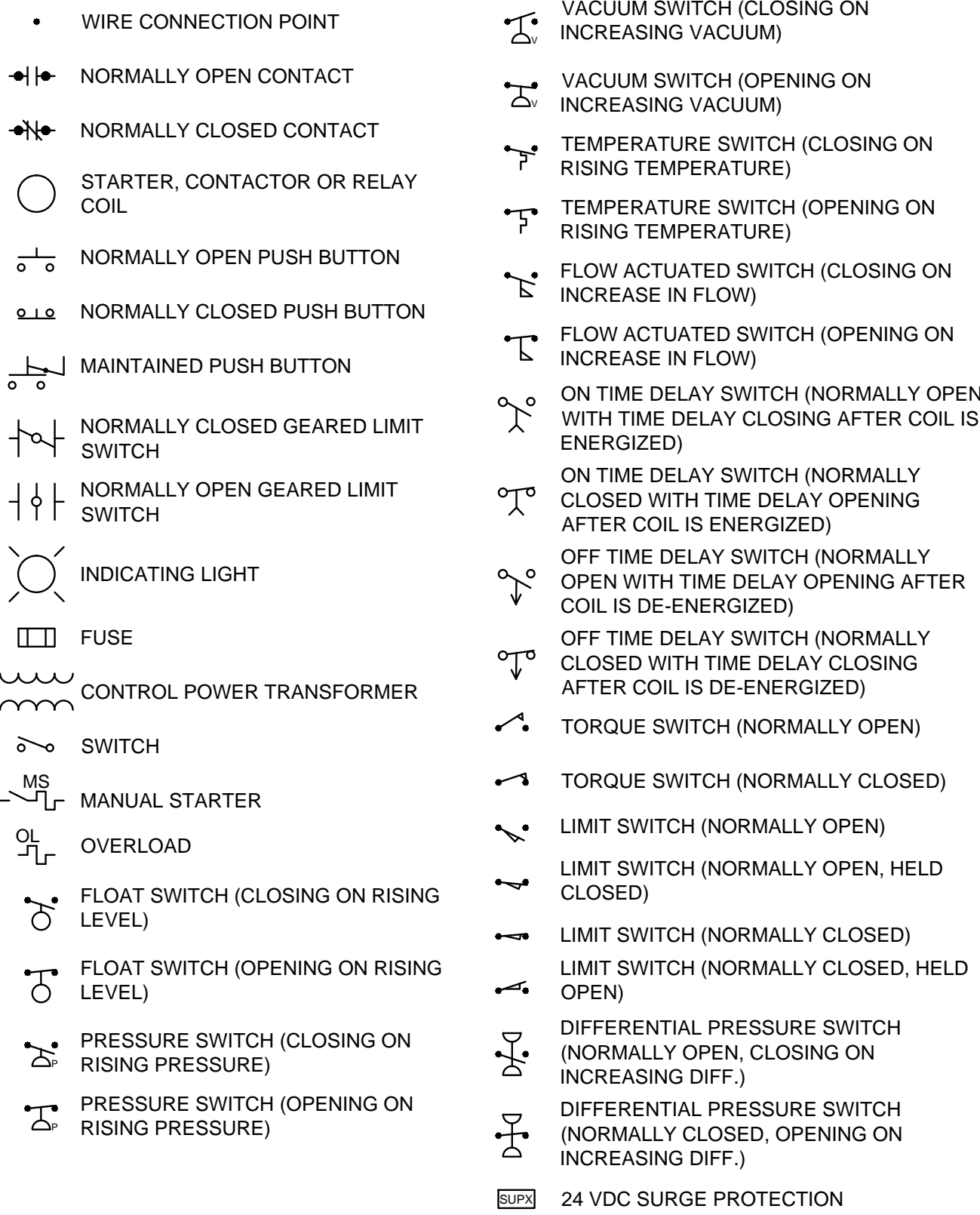
ONE LINE DIAGRAM LEGEND



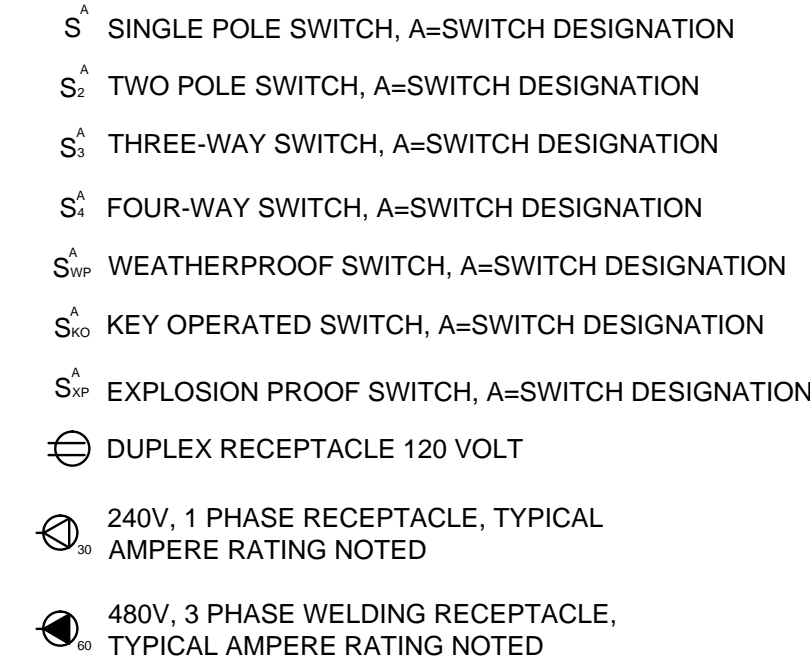
CONDUIT & WIRING INSTALLATION LEGEND



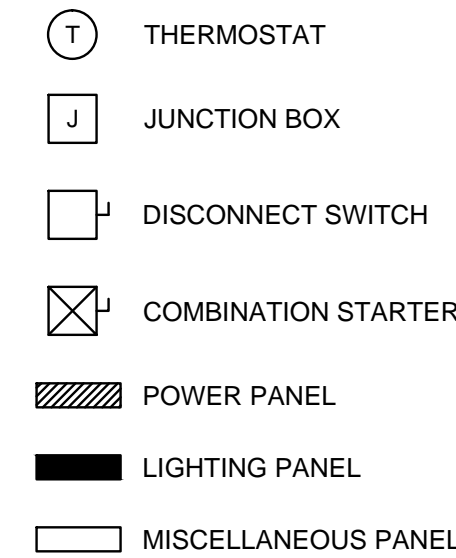
SCHEMATIC SYMBOLS



SWITCH & OUTLET SYMBOLS



MISCELLANEOUS SYMBOLS



ABBREVIATIONS

A	AMBER, AMPERE, ALARM	RECP	RECEPTACLE
AC	ALTERNATING CURRENT	RGS	RIGID GALVANIZED STEEL
AFD	ADJUSTABLE FREQUENCY DRIVE	RTD	RESISTANCE TYPE TEMP DETECTOR
AFF	ABOVE FINISHED FLOOR	RTU	REMOTE TERMINAL UNIT
AM	AMMETER	RVSS	REDUCED VOLTAGE SOLID STATE STARTER
ATO	AUTOMATIC THROWOVER	S2	SIZE 2 STARTER
AWG	AMERICAN WIRE GAUGE	SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
C	CLOSE, COUNTER, CONTACTOR	SP	SINGLE POLE
CAP	CAPACITOR	SPDT	SINGLE POLE DOUBLE THROW
CB	CIRCUIT BREAKER	SPST	SINGLE POLE SINGLE THROW
CD	CONTROL DAMPER	SS	SELECTOR SWITCH
CKT	CIRCUIT	SV	SOLENOID VALVE
CL2	CHLORINE	SWB	SWITCHBOARD
CP	CONTROL PANEL	SWGR	SWITCHGEAR
CPT	CONTROL POWER TRANSFORMER	T	THERMOSTAT, TIMER, TOTALIZER
CS	CONTROL STATION	TACH	TACHOMETER
CT	CYCLE TIMER, CURRENT TRANSFORMER	TB	TERMINAL BLOCK
CTM	CYCLE TIMER MOTOR	TD	TIME DELAY RELAY
2/C	2 CONDUCTOR	TEMP	TEMPERATURE
4"C	4" CONDUIT	TQ	TORQUE
DC	DIRECT CURRENT	TS	TEMPERATURE SWITCH
DM	DAMPER MOTOR, DEMAND METER	UG	UNDERGROUND
DPDT	DOUBLE POLE DOUBLE THROW	UPS	UNINTERRUPTIBLE POWER SUPPLY
DPST	DOUBLE POLE SINGLE THROW	V	VOLTS
DPS	DIFFERENTIAL PRESSURE SWITCH	VA	VOLT AMPERE
DS	DISCONNECT SWITCH	VLS	VALVE LIMIT SWITCH
E	ELECTRIC OPERATOR FOR CONTROL DAMPER OR VALVE	VM	VOLTMETER
EMH	ELECTRICAL MANHOLE	W	WHITE, WATTS
ETM	ELAPSED TIME METER	WH	WATTHOUR METER
EX	EXISTING	WM	WATT METER
F	FORWARD	WP	WEATHERPROOF
FS	FLOW SWITCH	XFMR	TRANSFORMER
G	GREEN, GROUND	XP	EXPLOSION PROOF
GFI	GROUND FAULT INTERRUPTER	Y	YELLOW
GLS	GEARED LIMIT SWITCH	Z	AUXILIARY RELAY
#8G	#8 GROUND WIRE	ZS	POSITION SWITCH
H	HIGH, HUMIDISTAT		
HH	HANDHOLE		
HMT	HIGH MOTOR TEMPERATURE		
HOA	HAND-OFF-AUTO		
HOR	HAND-OFF-REMOTE		
HP	HORSEPOWER		
HWCO	HIGH WATER CUTOFF		
HZ	HERTZ (CYCLE)		
I/O	INPUT/OUTPUT		
J	JUNCTION BOX		
KV	KILOVOLT		
KVA	KILOVOLT AMPERE		
KVAR	KILOVAR		
KW	KILOWATT		
KWH	KILOWATT HOUR		
L	LOW, LEVEL		
LA	LIGHTNING ARRESTOR		
LAN	LOCAL AREA NETWORK		
LP	LIGHTING PANEL		
LS	LIMIT SWITCH, LEVEL SWITCH		
LWCO	LOW WATER CUTOFF		
M	MAGNETIC MOTOR STARTER		
MA	MILLIAMPERE		
MCB	MAIN CIRCUIT BREAKER		
MCC	MOTOR CONTROL CENTER		
MCM	THOUSAND CIRCULAR MIL		
MD	MOISTURE DETECTOR		
MH	MANHOLE, MOUNTING HEIGHT		
MOV	MOTOR OPERATED VALVE		
MS	MANUAL MOTOR STARTER		
MSH	MOTOR SPACE HEATER		
N	NEUTRAL		
NC	NORMALLY CLOSED		
NO	NORMALLY OPEN, NUMBER		
O	OPEN		
OL	OVERLOAD		
PB	PUSH BUTTON, PULL BOX		
PF	POWER FACTOR METER		
PH	PHASE (CHEMICAL TERM)		
PLC	PROGRAMMABLE LOGIC CONTROLLER		
PP	POWER PANEL		
PS	PRESSURE SWITCH		
PT	POTENTIAL TRANSFORMER, PROGRAM TIMER		
2P	2 POLE		
R	RED, RAISE, RELAY, REVERSE		

AREA DESIGNATIONS

THE SPECIAL AREA DESIGNATION BOXES, AS DEFINED BELOW, ARE LOCATED ON THE PLAN DRAWINGS TO DEFINE ELECTRICAL INSTALLATION REQUIREMENTS. DESIGNATION BOXES ARE LOCATED WITHIN ROOM OR BELOW ROOM NUMBER. ALL INDOOR AREAS NOT INDICATED OTHERWISE ARE AREA TYPE 1 AND MINIMUM NEMA TYPE 1 ENCLOSURES.

AREA TYPE 1A	CORROSIVE CHEMICAL FEED AND STORAGE ROOMS. CONDUIT SYSTEM SHALL BE EXPOSED PVC RIGID NON-METALLIC CONDUIT WITH PVC FITTINGS, BOXES, AND ACCESSORIES.
AREA TYPE 4	INDOOR WET LOCATIONS SUCH AS VAULTS, HOSEDOWN AREAS, BASEMENTS, ETC. MINIMUM NEMA TYPE 4 ENCLOSURE FOR EQUIPMENT AND GASKETED FITTINGS IN A CONDUIT SYSTEM.
AREA TYPE 7A	CLASS 1, DIVISION 1 AREA AS DEFINED BY NEC. ALL EQUIPMENT AND CONDUIT SYSTEMS SHALL BE RATED FOR USE IN THIS AREA.
AREA TYPE 7B	CLASS 1, DIVISION 2, GROUP C AND D (METHANE, GASOLINE) AS DEFINED BY NEC. EQUIPMENT AND CONDUIT SYSTEMS SHALL BE RATED FOR USE IN THIS AREA.
AREA TYPE 12	INDOOR, DRY, DIRTY AREA. REQUIRES MINIMUM NEMA TYPE 12 GASKETED ENCLOSURES FOR ALL EQUIPMENT AND GASKETED FITTINGS IN CONDUIT SYSTEMS.
AREA TYPE 4X	OUTDOOR AND INDOOR WET LOCATIONS SUBJECT TO CORROSION. CONDUIT SYSTEM SHOULD BE PVC COATED RIGID GALVANIZED STEEL WITH PVC COATED FITTINGS, BOXES, AND STAINLESS STEEL HARDWARE.

GENERAL REQUIREMENTS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS NOT SHOWN ON THE PLANS. THIS SHALL INCLUDE ALL CONDUITS SHOWN ON THE ONE-LINES AND HOME-RUNS SHOWN ON THE PLAN DRAWINGS. CONDUITS SHALL BE ROUTED AS DEFINED IN THE SPECIFICATIONS.
- SPARE WIRES SHALL BE TAPED AND COILED.
- IF EQUIPMENT SUPPLIED BY MANUFACTURER HAS A LARGER LOAD THAN VALUE SHOWN, THE CABLE CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE ENLARGED, AS REQUIRED, TO ACCOMODATE THE HIGHER VALUE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPERLY SIZED STARTER OVERLOADS FOR EQUIPMENT FURNISHED.
- LIGHTING AND RECEPTACLE CIRCUITS DESIGNATED ON THE FLOOR PLANS ARE NOT SHOWN ON THE ONE-LINES. CONDUCTORS FOR LIGHTING, RECEPTACLES, AND MISCELLANEOUS 120VAC CIRCUITS SHALL BE MINIMUM NO. 12 AWG. CONDUIT FOR LIGHTING, RECEPTACLES, AND MISCELLANEOUS 120VAC CIRCUITS SHALL BE MINIMUM 3/4".
- IN AREAS WHERE THERE ARE OVERHEAD BRIDGE CRANES, HOISTS, ETC., NO CONDUITS SHALL BE RUN OVERHEAD THAT WILL INTERFERE WITH THE OPERATION OF THE EQUIPMENT.

GENERAL NOTES

- SOLID LINES — INDICATE NEW WORK OR EQUIPMENT.
- DOTTED LINES INDICATE EXISTING WORK OR EQUIPMENT.
- DASHED LINES - - - INDICATE FUTURE WORK OR EQUIPMENT.
- THIS IS A GENERAL LEGEND SHEET. SOME SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED ON THIS SPECIFIC PROJECT.
- INFORMATION RELATED TO CIRCUIT IDENTIFICATION, WIRE & CONDUIT SIZES, AND ROUTING, IS ON THE FOLLOWING DRAWING TYPES.
 - ONE-LINE DIAGRAMS SHOW CIRCUIT IDENTIFICATION, WIRE QUANTITY AND SIZES, AND CONDUIT SIZE WITHIN STRUCTURES. ONE-LINE DIAGRAMS ALSO INDICATE ORIGIN AND DESTINATION OF CIRCUITS, AND IDENTIFY CIRCUITS ROUTED UNDERGROUND.
 - FOR CIRCUITS WITHOUT UNDERGROUND PORTIONS, BUILDING FLOOR PLANS SHOW LOCATION OF EQUIPMENT FOR DETERMINING CIRCUIT LENGTH WITHIN THE STRUCTURE. FOR CIRCUITS WITH UNDERGROUND PORTIONS, ANTICIPATED PENETRATION OF UNDERGROUND CONDUITS ARE SHOWN ON STRUCTURE PLANS FOR DETERMINING THE LENGTH OF IN-STRUCTURE PORTIONS OF CIRCUITS. BUILDING FLOOR PLANS MAY ALSO SHOW HOME RUNS FOR LIGHTING, RECEPTACLE, AND OTHER MISCELLANEOUS EQUIPMENT CIRCUITS.
 - SITE PLANS INDICATE THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS. CIRCUITS ROUTED IN UNDERGROUND CONDUITS OR DUCT BANKS ARE INDICATED IN DUCT BANK SECTIONS REFERENCED ON THE SITE PLAN.
 - DUCT BANK SECTIONS AND SCHEDULES IDENTIFY CONDUIT SIZE, CONDUIT MATERIAL, ARRANGEMENT OF THE UNDERGROUND CONDUITS, AND CIRCUITS ROUTED IN EACH UNDERGROUND CONDUIT.
- CLOUDED MARKINGS INDICATE WORK IN EXISTING AREAS THAT IS NEW OR NEW WORK ON AN EXISTING PIECE OF EQUIPMENT.

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REVISION DESCRIPTION

NO. DATE DESD DWN

DESIGNED BY: TFW

DRAWN BY: TFW

CHECKED BY: JMM

JOB #: 2374c

DATE: APRIL 2015

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TELLURIDE WASTEWATER TREATMENT FACILITY
2015 RAW LIFT STATION IMPROVEMENT PROJECT
TOWN OF TELLURIDE, COLORADO

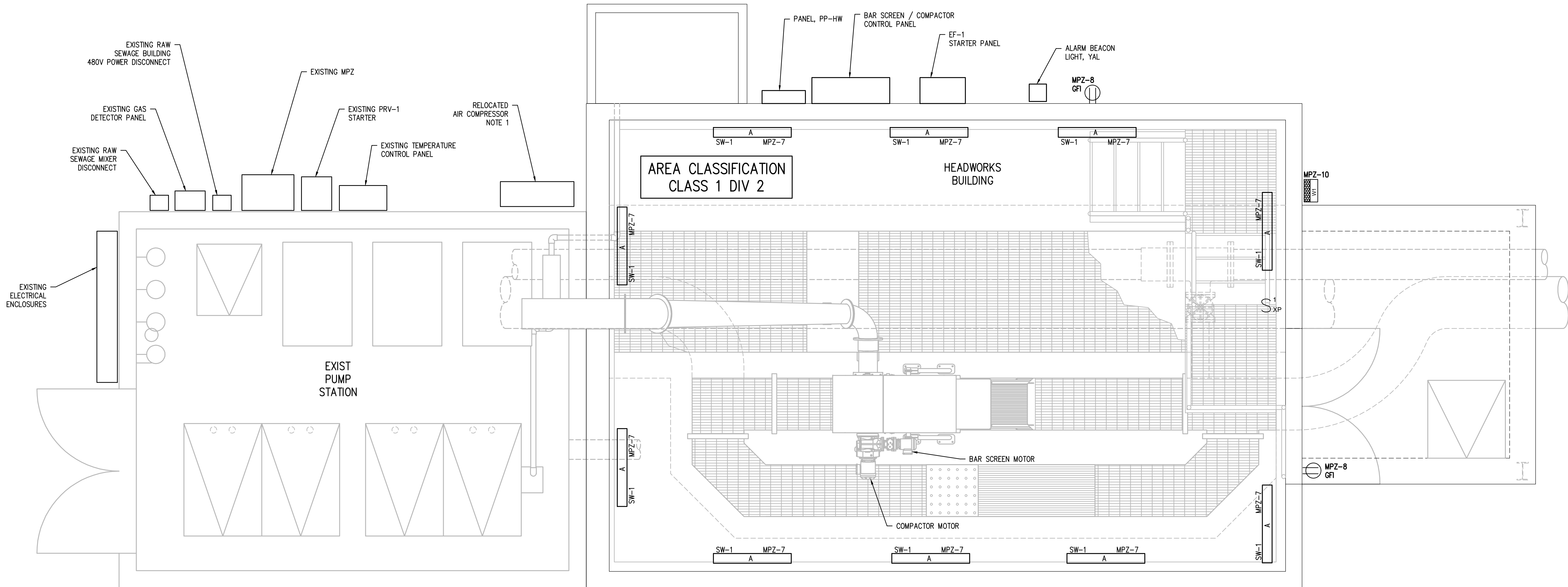
ELECTRICAL
LEGEND

SHEET NO.

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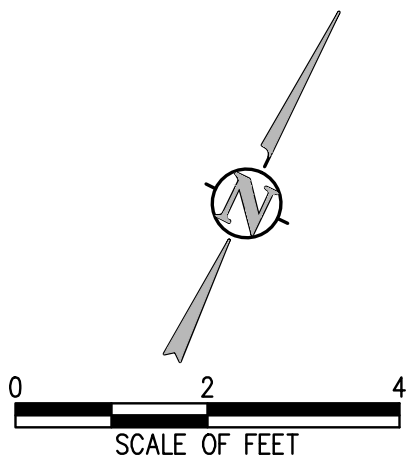
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LIGHTING FIXTURE SCHEDULE				
SYMBOL	LAMP	MTG HEIGHT	DESCRIPTION	MANUFACTURER
A	LED, 120V	MOUNT ON WALL AT 10' AFF	4 FOOT FIXTURE-HEAVY DUTY AND MOUNTING HARDWARE FOR MOUNTING ON THE WALL ANGLED TOWARD THE SPACE SUITABLE FOR CLASS 1, DIV 2 LOCATIONS	CROUSE-HINDS: MLL4/UNV1-S903
X1	LED, 120V	1 FT ABOVE DOOR	ILLUMINATED EXIT SIGN, COMPLETELY SEALED HOUSING SUITABLE FOR EXPLOSION-PROF AREAS AND WET LOCATIONS.	HUBBELL - DUAL/LITE: XPE-W/S-R-E
W1	LED, 120V	1 FT ABOVE DOOR	DIE CAST ALUMINUM FOR RUGGED MOUNTING AND HEAT DISSIPATION, SPECULAR REFLECTOR, VERTICAL LAMP AND REFRACTOR WITH PHOTOELECTRIC CONTROL	HUBBELL: LNC2-12LU-4K-4-BBU

HEADWORKS BUILDING ELECTRICAL LIGHTING PLAN
1/2" = 1'-0"



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REVISION DESCRIPTION			
NO.	DATE	DESIGNED BY	DRAWN BY

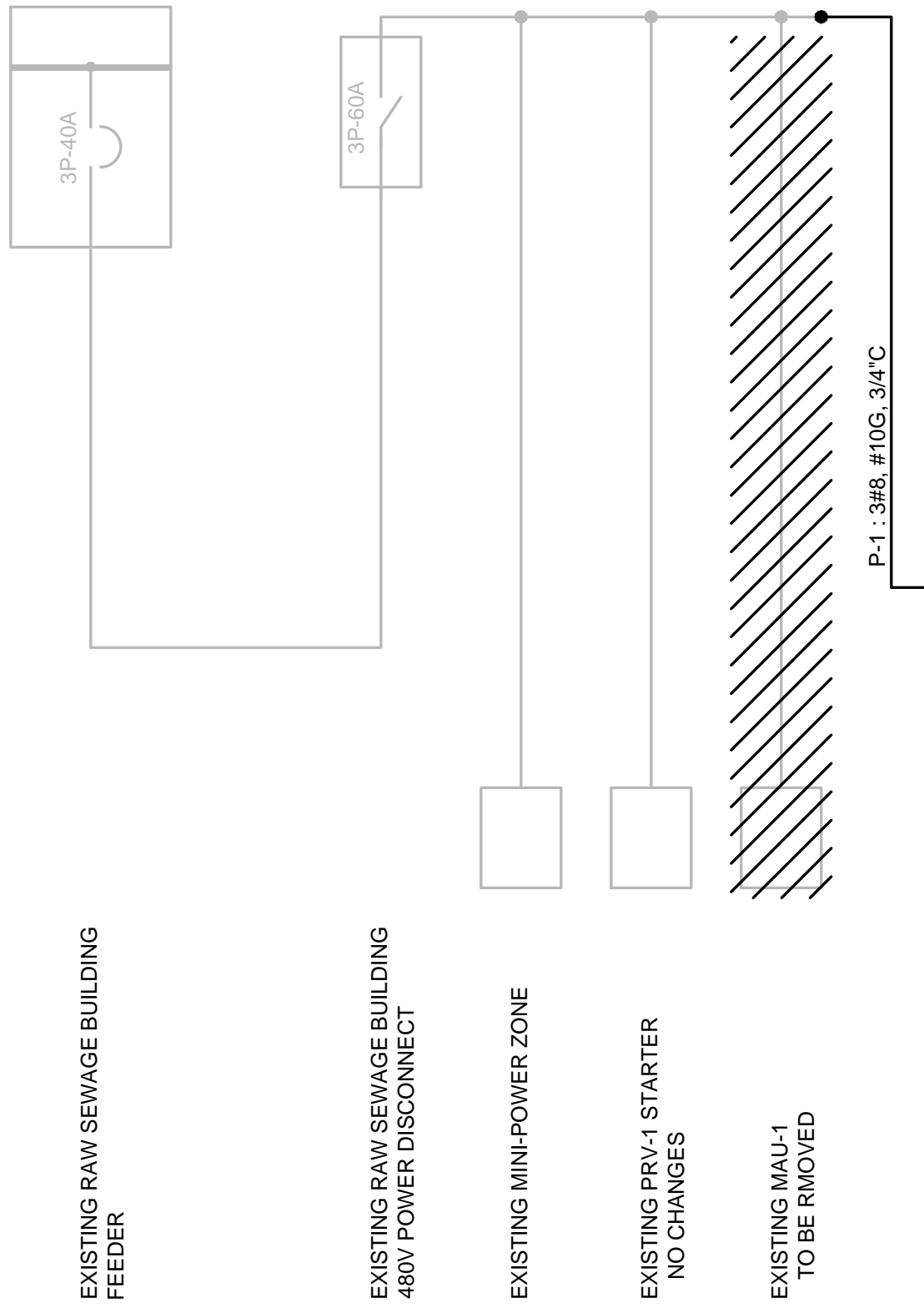
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DRAWN BY:	TFW
CHECKED BY:	JJM
JOB #:	2374c
DATE:	APRIL 2015
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TELLURIDE WASTEWATER TREATMENT FACILITY 2015 RAW LIFT STATION IMPROVEMENT PROJECT TOWN OF TELLURIDE, COLORADO	HEADWORKS BUILDING ELECTRICAL LIGHTING PLAN
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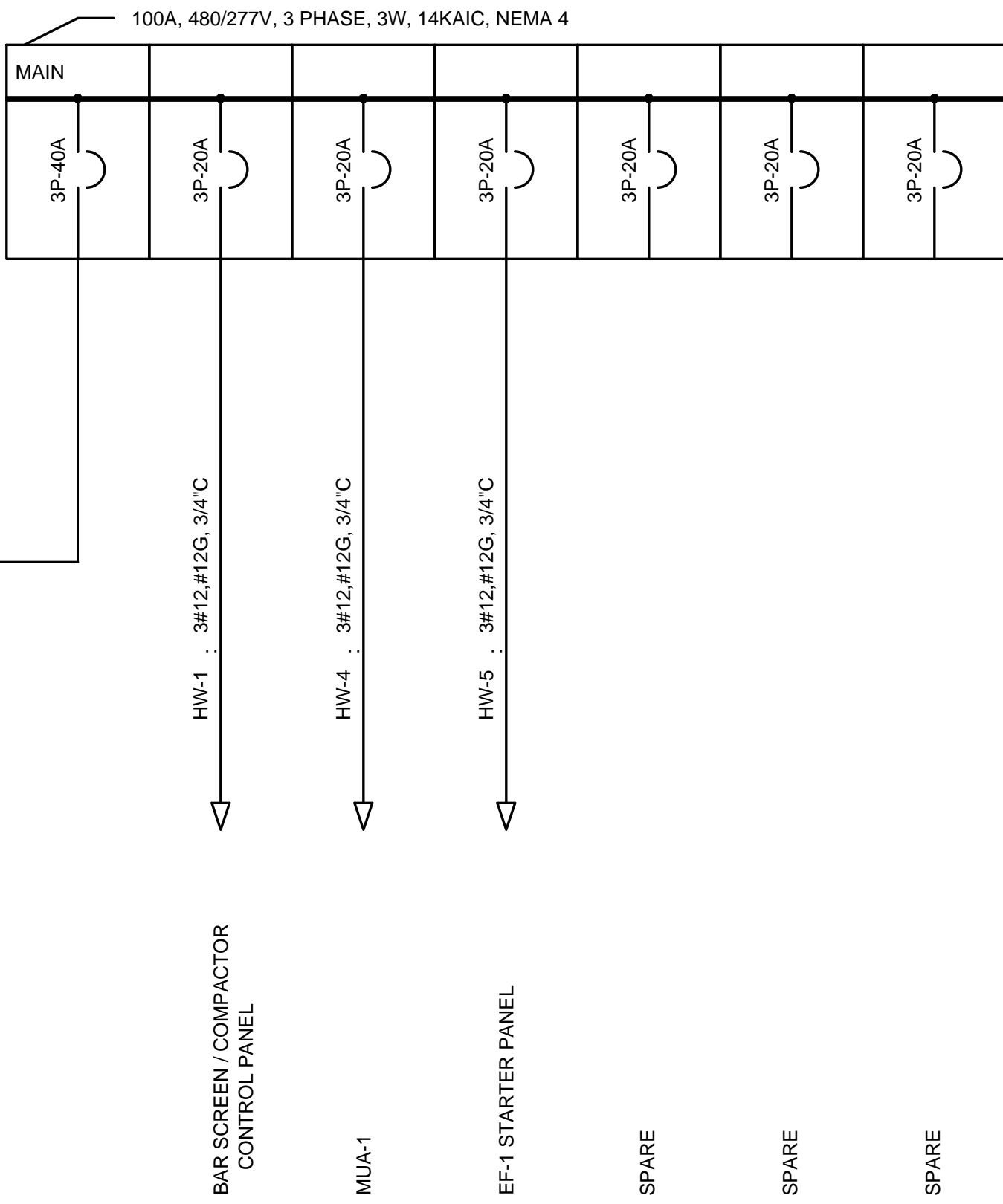
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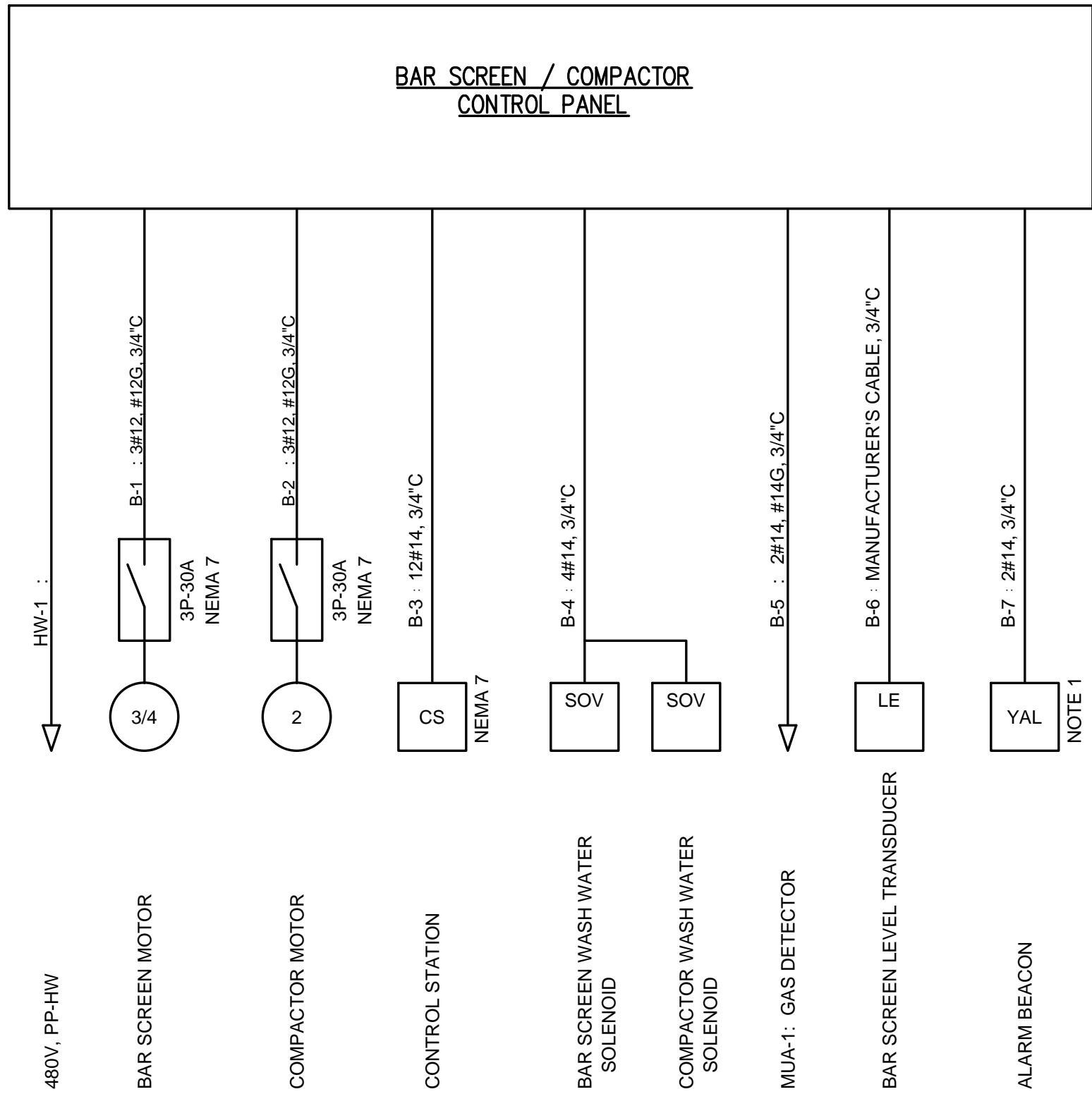
MCC-1 PARTIAL
ONE-LINE DIAGRAM



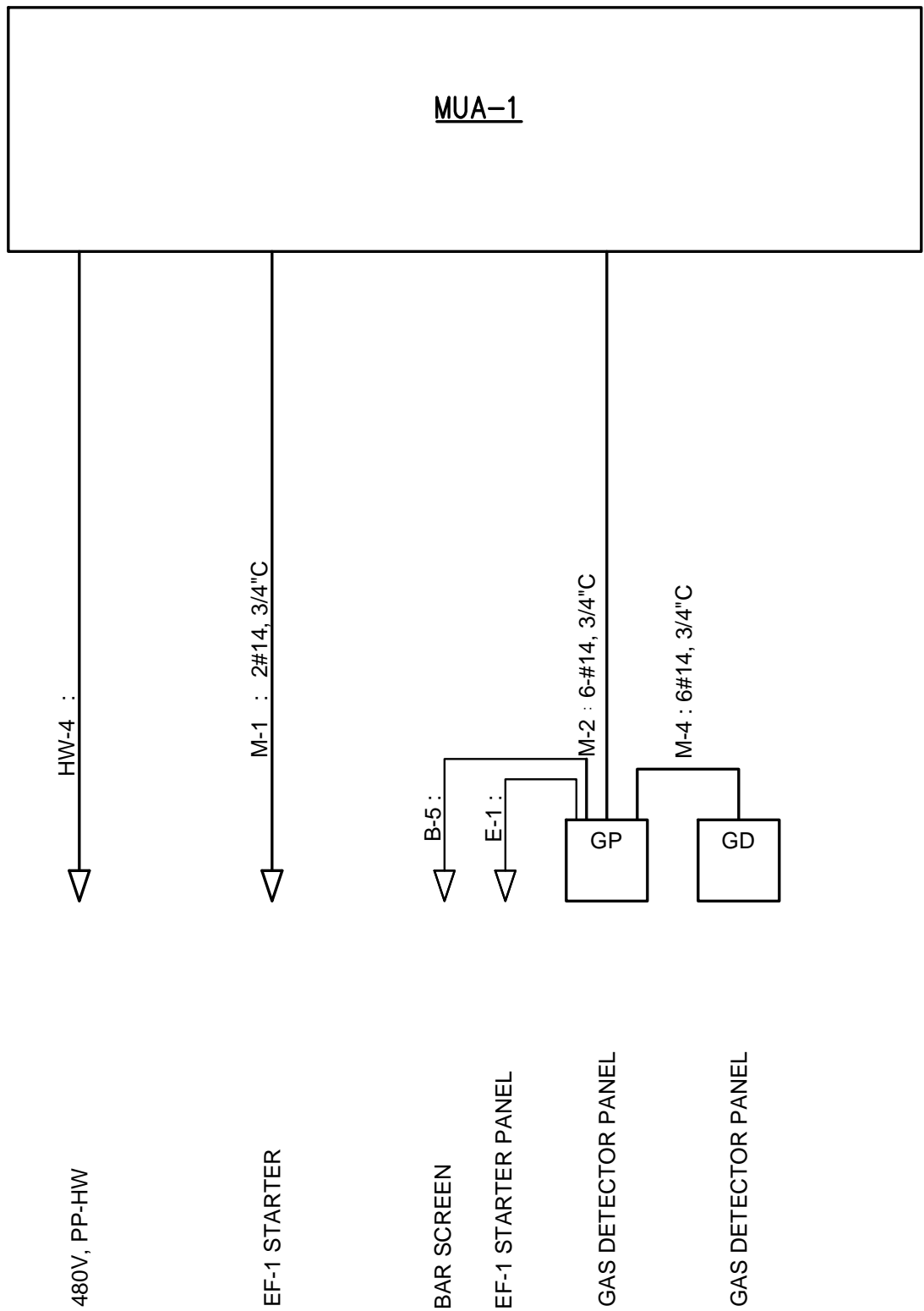
POWER PANEL, PP-HW
ONE-LINE DIAGRAM



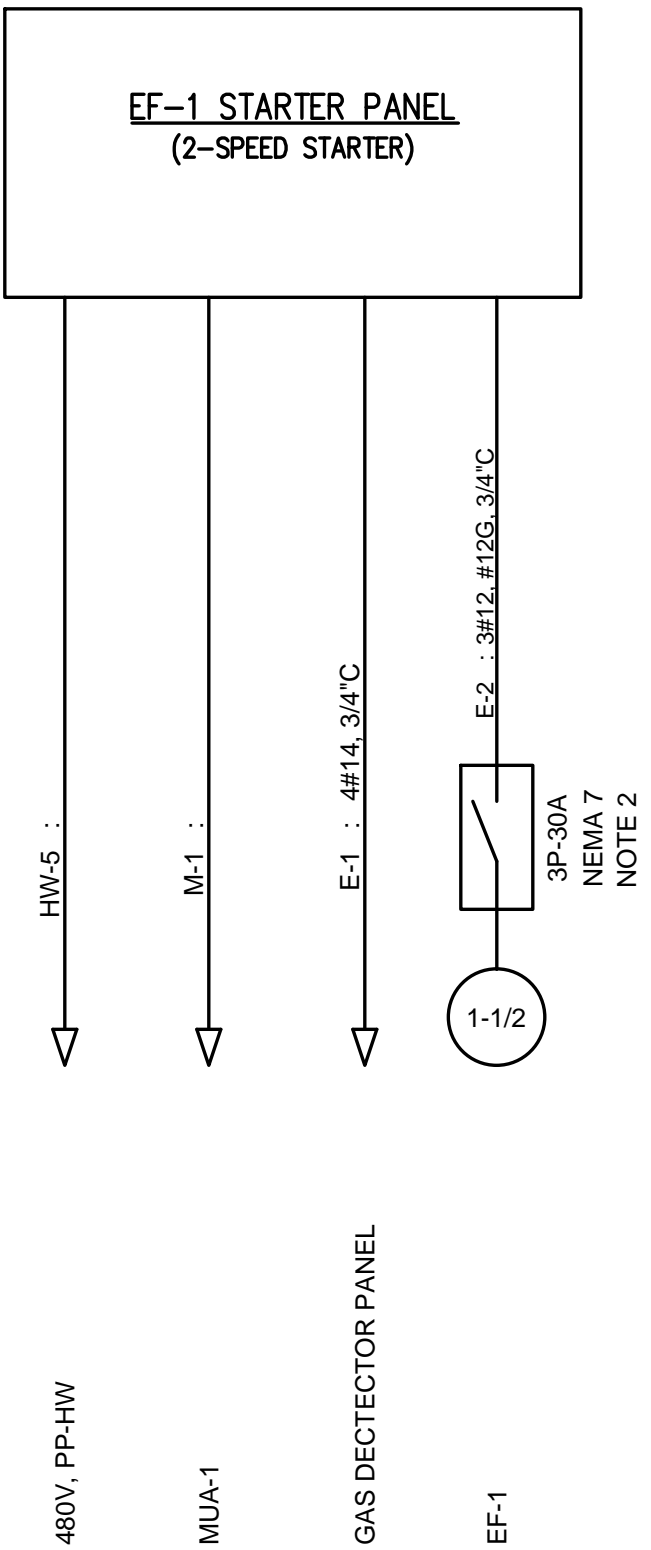
BAR SCREEN / COMPACTOR
ONE-LINE DIAGRAM



MUA-1
ONE-LINE DIAGRAM



EF-1
ONE-LINE DIAGRAM



NAME:			MPZ			BUS:			COPPER						MAINS:			3P-60A														
SERVICE:			120/208 VAC, 3 PHASE						RATING:			60A			LOCATION:			RAW SEWAGE BUILDING														
MOUNTING:			SURFACE, NEMA 3R						AIC RATING:			10,000A																				
V.A.									PHASE			BREAKER			CIRCUIT NUMBER			BREAKER			PHASE			LOAD						V.A.		
A	B	C																												A	B	C
100			GAS DETECTOR						1	15	1	2	20	1	LIGHTS - EXISTING						250											
	20		WETWELL LEVEL TRANSMITTER						1	15	3	4	20	1	RECEPTACLES - EXISTING							180										
		0							1	15	5	6	20	1	TEMPERATURE CONTROL PANEL								50									
250									* INSIDE LIGHTS						1	20	7	8	20	1	* RECEPTACLES - NEW						360					
	600		AIR COMPRESSOR						2	20	9	10	20	1	* OUTSIDE LIGHTS							50										
		600	-						-	-	11	12	20	1									0									
350	620	600	TOTALS PER PHASE PER SIDE															610	230	50												
960	850	650	TOTALS PER PHASE																													
	2460		PANEL TOTAL																													

EXISTING LIGHTING PANEL AT HEADWORKS BUILDING
• = NEW CIRCUITS AND BREAKERS

- NOTES:
- THE ALARM BEACON SHALL BE POWERED FROM A CIRCUIT FROM THE MPZ. THE BEACON SHALL TURN ON IF ANY OF THE FOLLOWING ALARMS OCCUR: BAR SCREEN ALARM, WASHER/COMPACTOR ALARM, MUA-1 ALARM, GAS DETECTOR ALARM.
 - THE DISCONNECT IS BUILT INTO THE FAN HOUSING AND SUPPLIED WITH THE FAN.